Oral mucosal lesion

จัดทำโดย พญ.ขวัญชนก บุญศรารักษพงศ์

อาจารย์ที่ปรึกษา อ.รักษ์ ตนานุวัฒน์

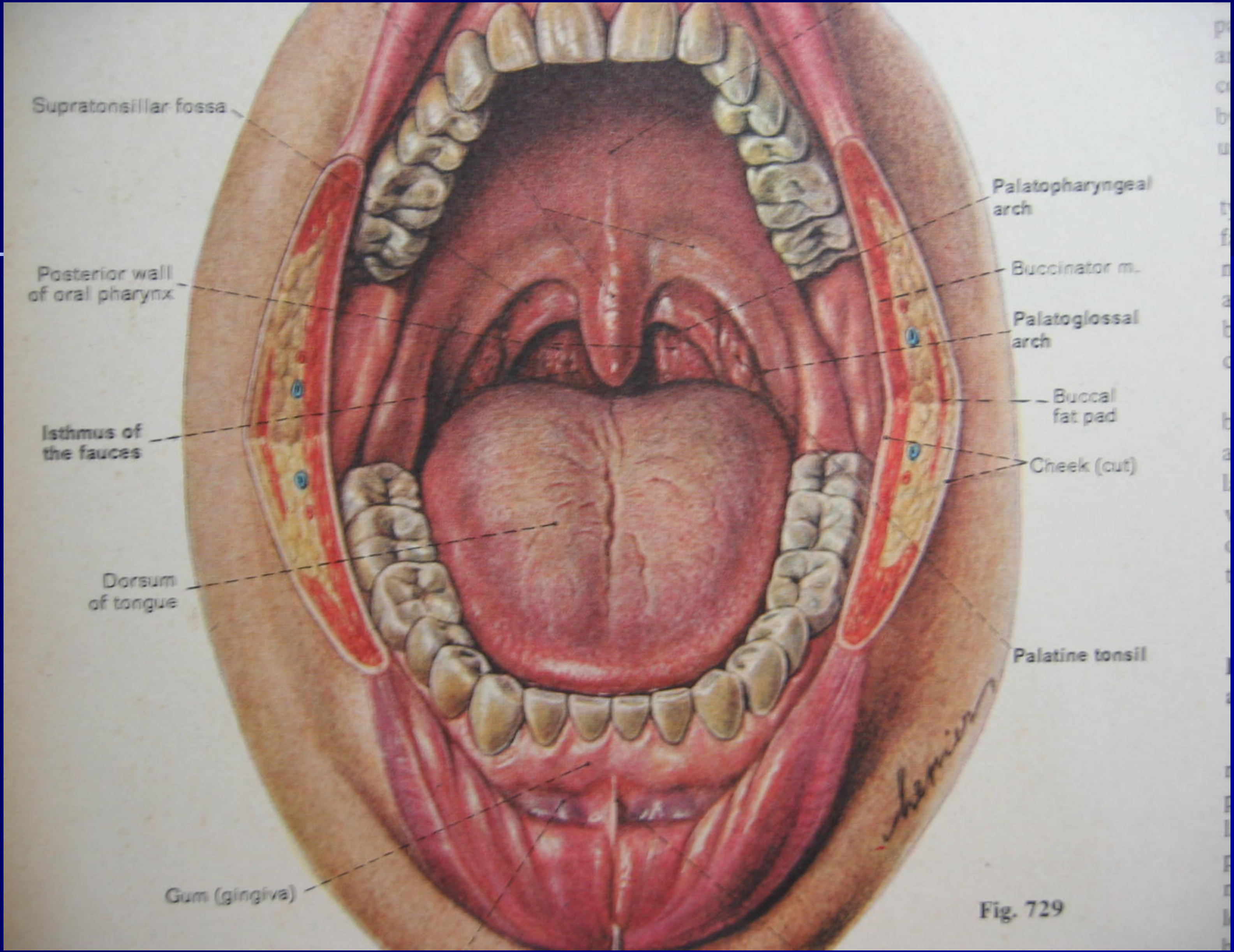

Supratonsillar fossa
Palatopharyngeal arch
Posterior wall of oral pharynx
Buccinator m.
Palatoglossal arch
Buccal fat pad
Isthmus of the fauces
Cheek (cut)
Dorsum of tongue
Palatine tonsil
Gum (gingiva)

Fig. 729

แบ่งเป็น

- 1. infection
- 2. pigmented lesion
- 3. dermatologic disease
- 4. disease of tongue
- 5. halitosis
- 6. HIV disease and AIDS
- 7. hematologic and nutritional disease

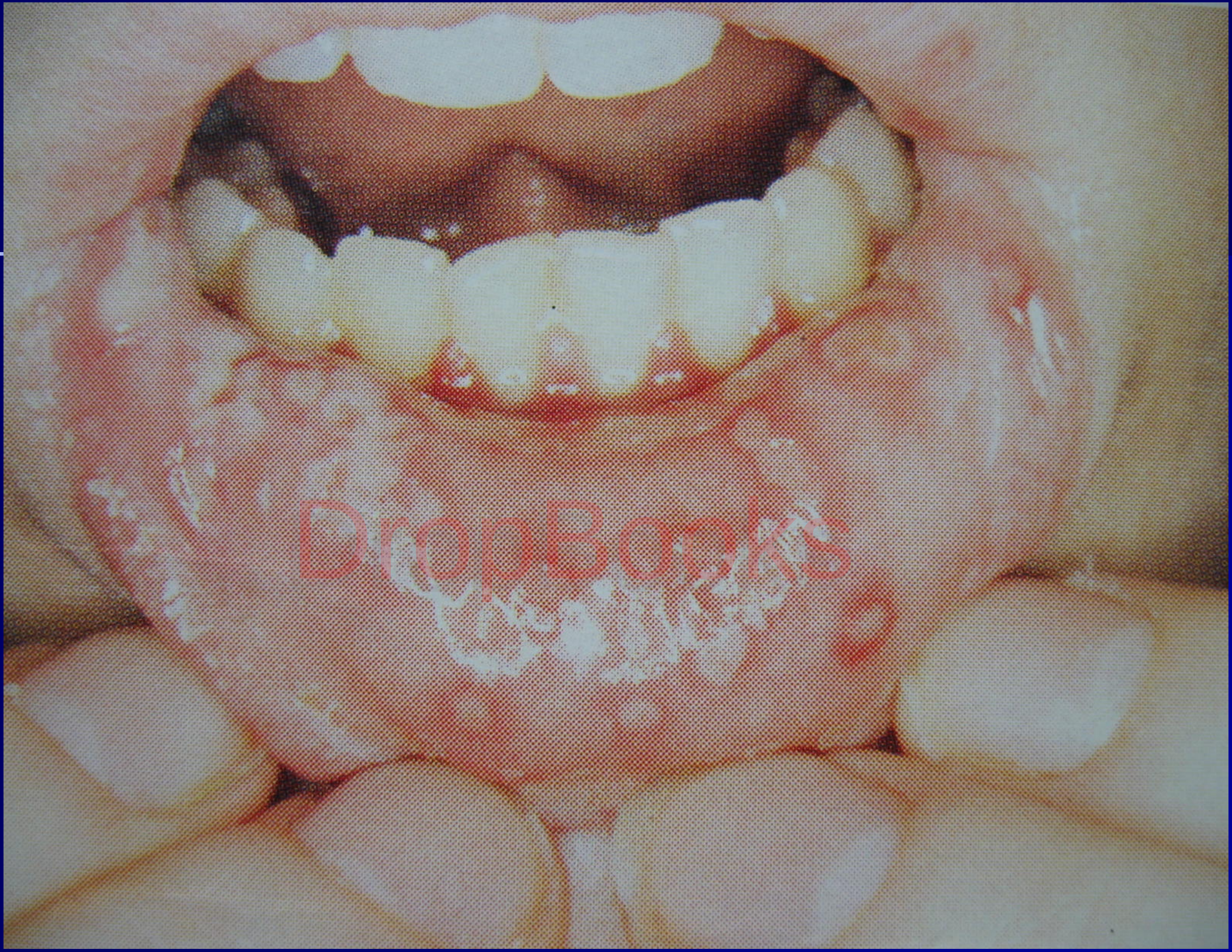
infection

- แบ่งเป็น
- 1. viral infection
- 2. bacterial infection
- 3. fungal infection

Viral infection

- **1.Herpes simplex infection**
- แบ่งเป็น
  - – 1. primary herpetic gingivostomatitis
  - – 2. secondary or recurrent herpes simplex infection

- **Primary herpetic gingivo stomatitis**
- Cause: HSV typeI (occationally typeII)
- Clinical feature :
- - multiple painful oral ulcer proceded by vesicle , may have similar perioral & skin lesion
- Usual location : lip and oral mucosa



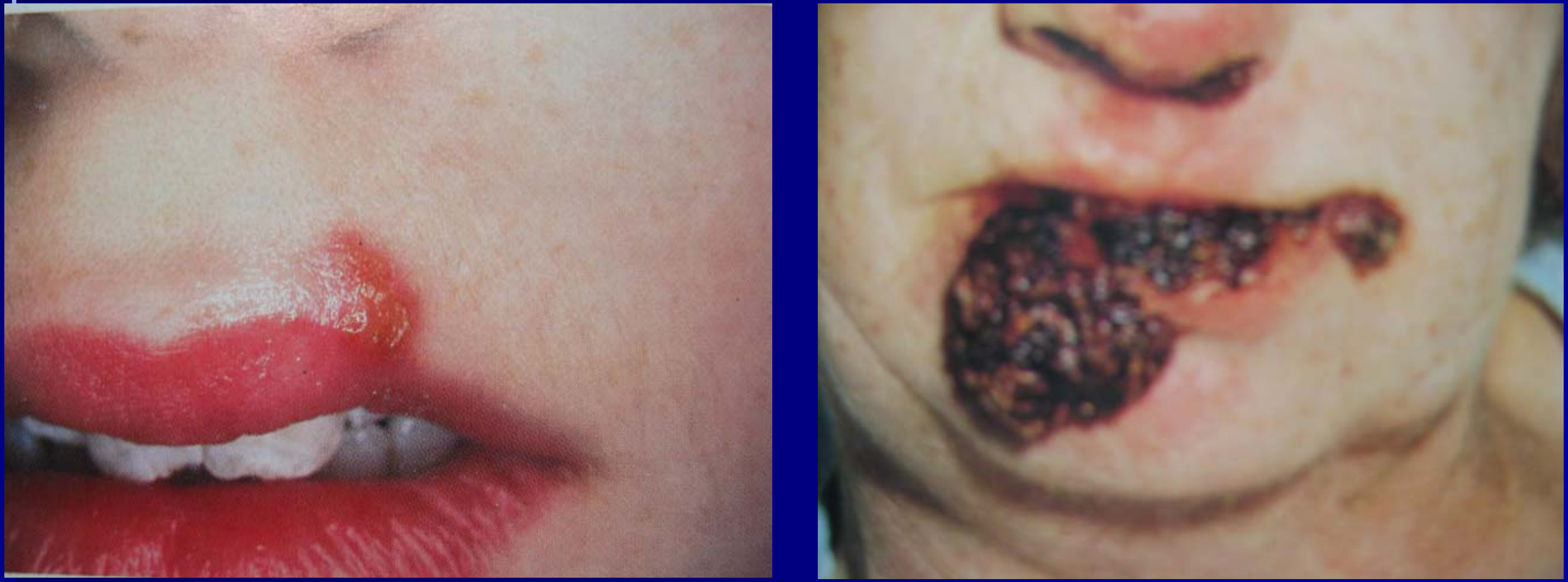
- Self limited , heal in about 2 wk.
- Following resolution , the virus migrates along the periaxon sheath of the trigeminal n. to the trigeminal ganglion (latent state)

- Rx :
- 5%acyclovir ointment 5times/day
- oral acyclovir400mg 5 times/day
- Other virus specific drugs
  - Idoxuriresis
  - Vidarabine (ara-A)

  drug not prevent recurrent

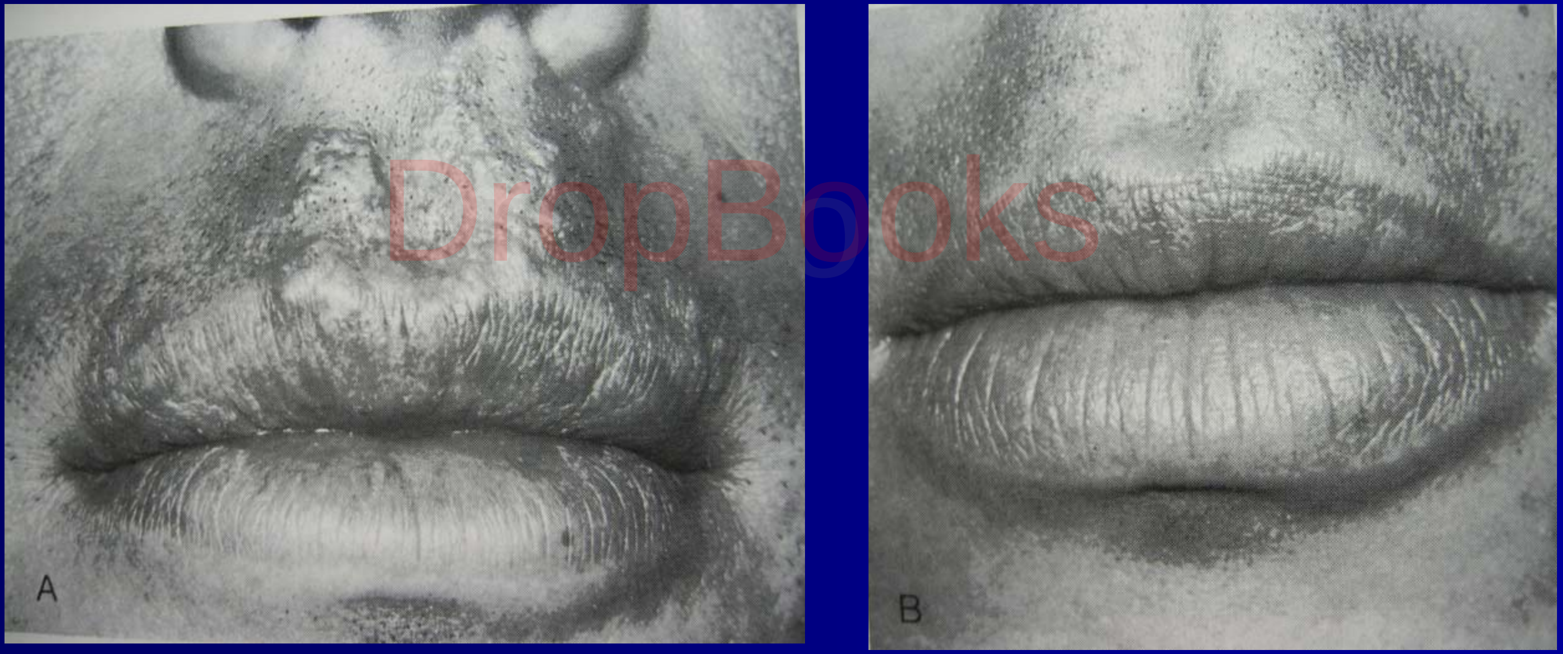
- **Secondary HSV Infection**
- Cause : HSV (represents reactivation of virus)
- Precipitated by: stress, sunlight , cold temperature , low resistance and immunodeficiency

- Clinical feature: multiple small ulcers proceded by vesicle, burning, painful
- Usual location: lip, intraorally on palate, gingiva
- typically occur at or near the same site with each recurrence
- Called Herpetic whitlow when occur around fingernail

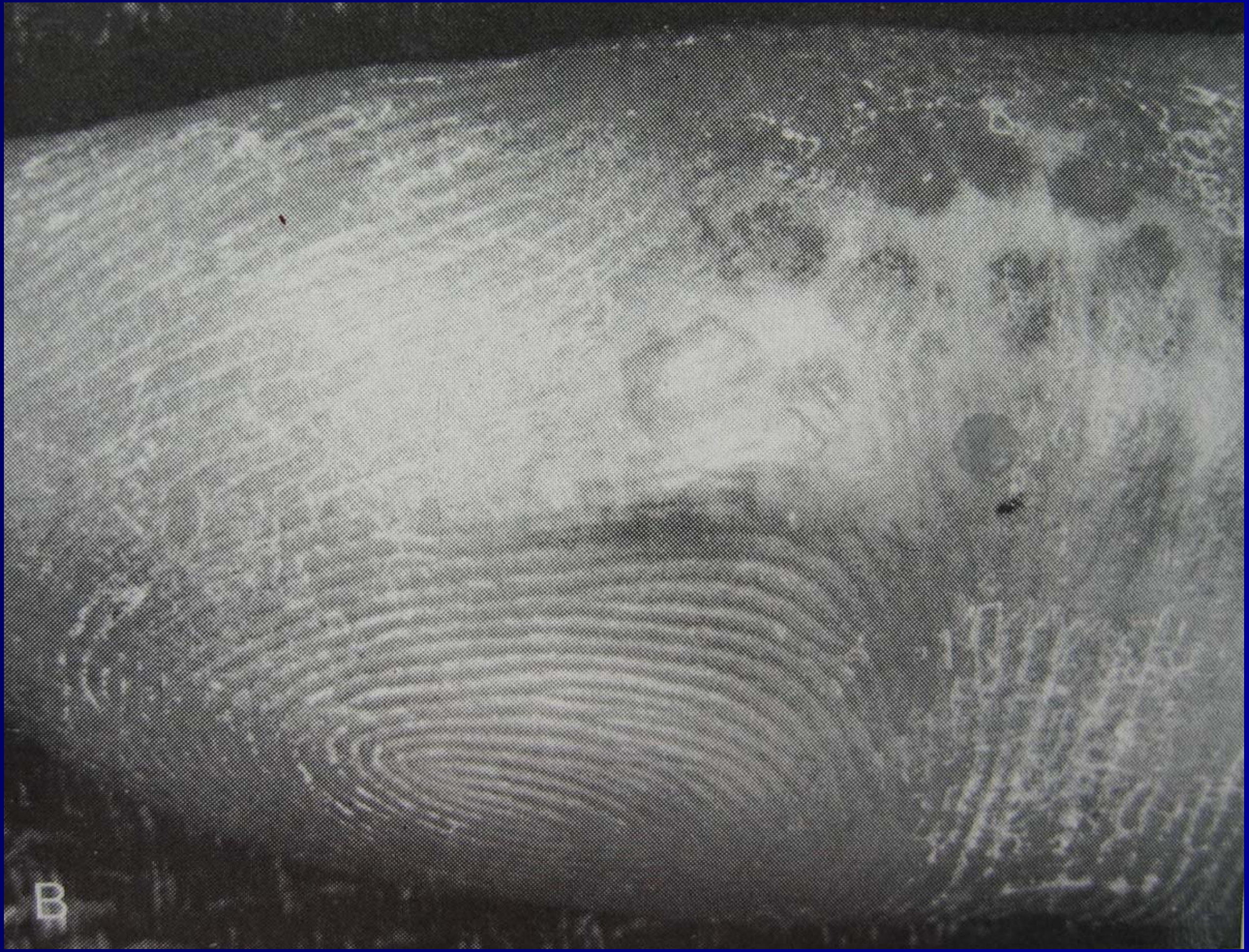


Herpes labialis

Self limited , heals in 2 wk. without scar

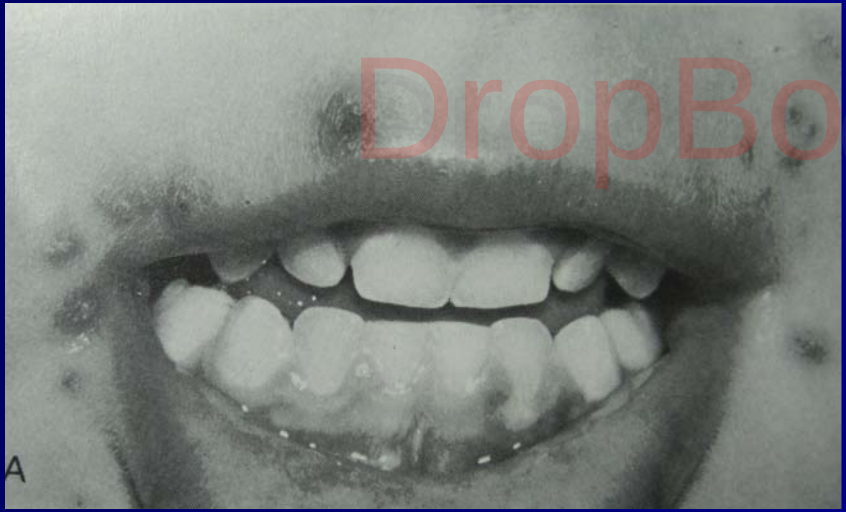


Herpetic whitlow



- Rx:
- Symptomatic
- Viral specific drug –acyclovir (topical or systemic)

- **2. chicken pox**
- Cause: varicella zoster virus
- Clinical feature: painful, pruritic vesicles and ulcers, may form bullous
- Location: usually on trunk and face , few oral lesion (tongue, gingiva ,or palate)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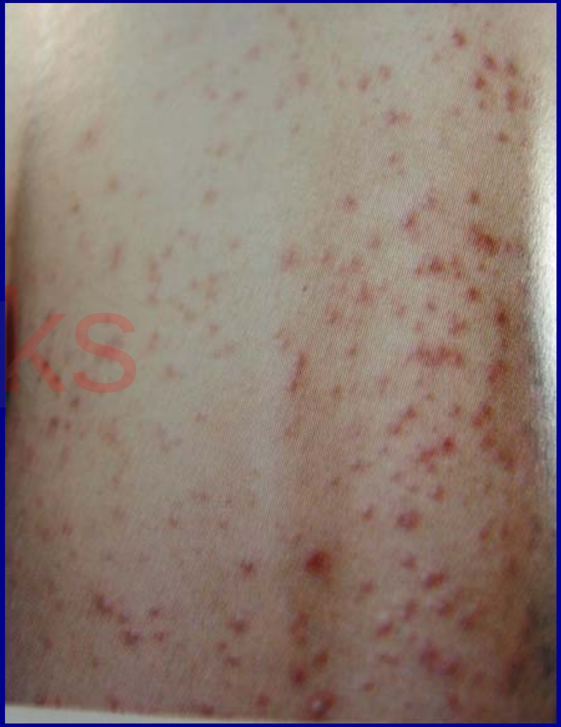
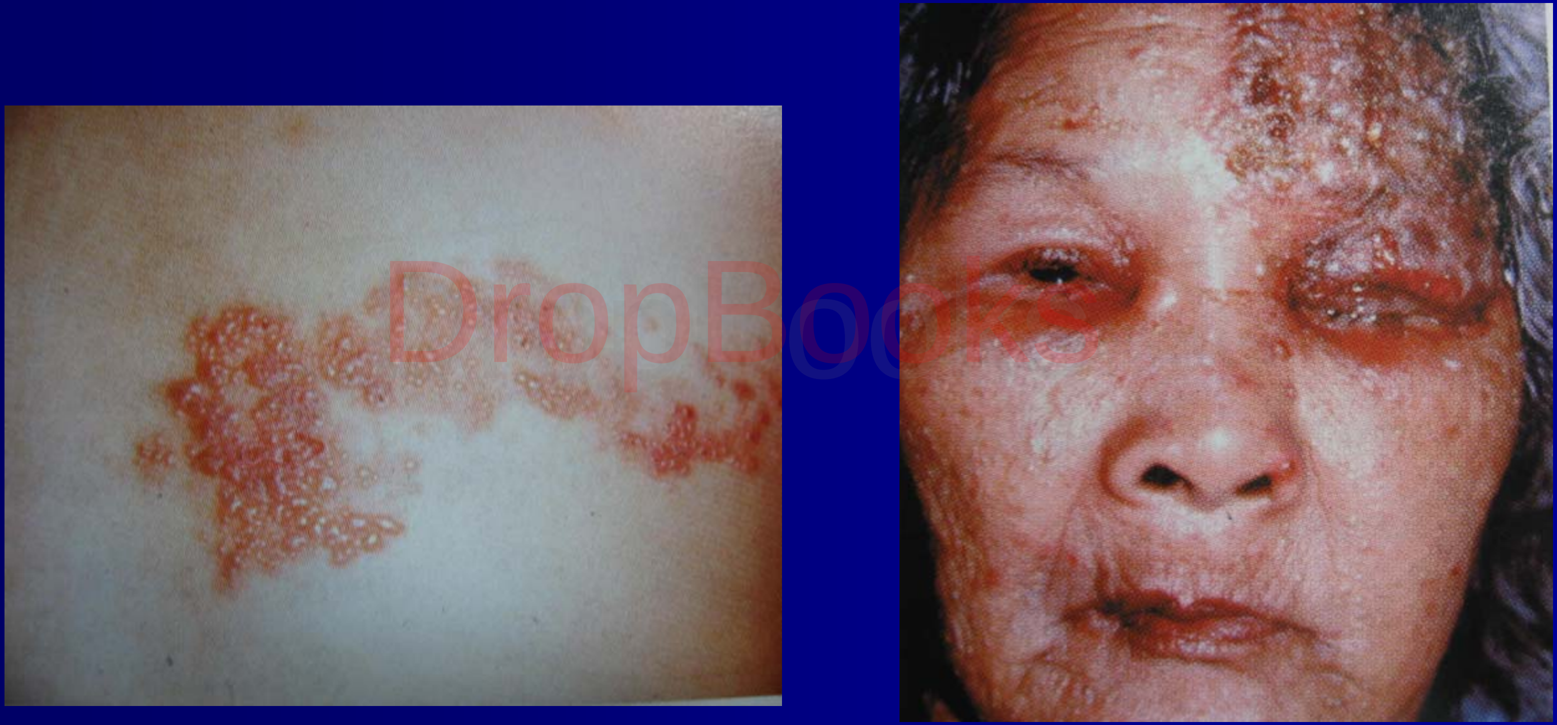


- During the disease process , the viral may progress along sensory n. to the sensory ganglion (undetectable form, latent state)
- Self limited within 2 wk.

- Common in childhood disease
- Tx.
  - Supportive treatment

- **3. Herpes zoster**
- Cause: reactivation of varicella zoster virus
- follows immunosuppressive state
- Clinical feature: unilateral vesicular eruption and ulceration in linear pattern distributed along a sensory n. course , painful

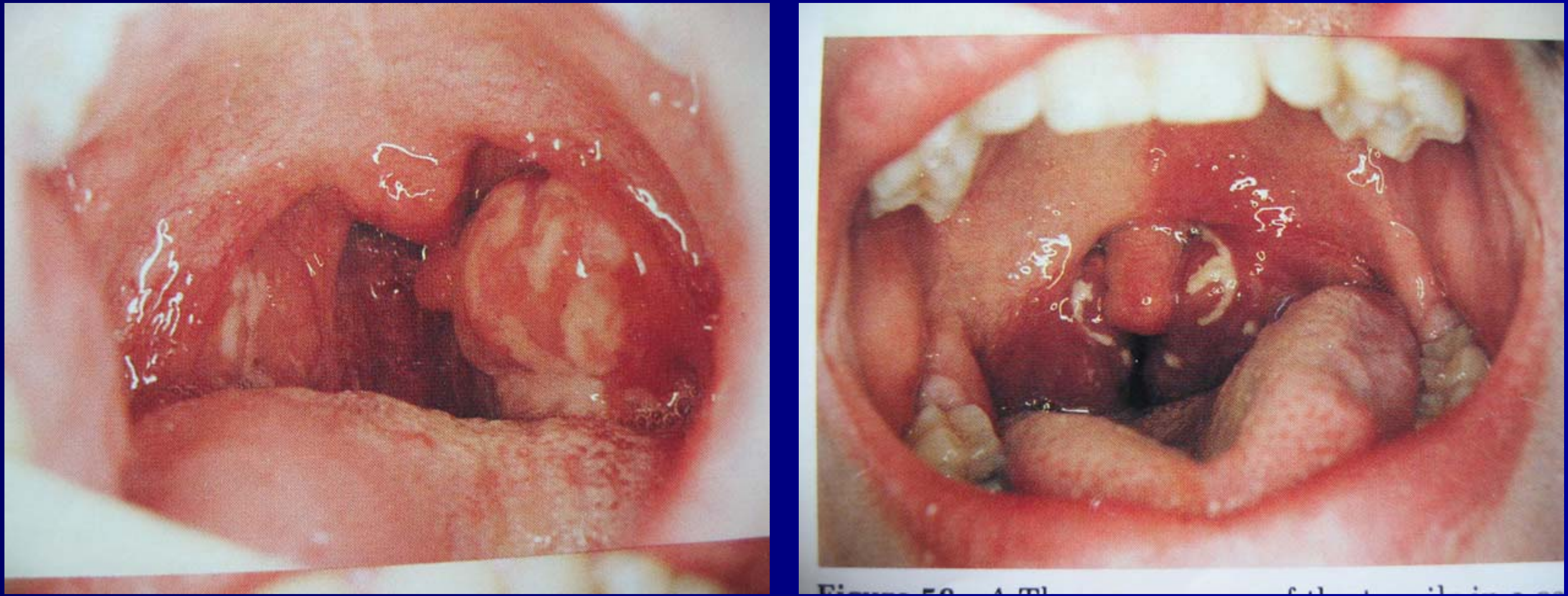


- Location: usually on head, neck, trunk, rare in oral (cheek ,tongue, gingiva or palate)
- If involve facial and auditory n. produces “Ramsay Hunt syndrome” –facial paralysis ,vesicles of the ipsilateral external ear, tinnitus, deafness,and vertigo

- Gradual healing without scar (several weeks)
- Postherapetic neuralgia is common

- Tx.
- Supportive
- High dose acyclovir 800 mg 5times/day
- Topical capsaicin (substance P inhibitor) for post herpetic pain
- In immunocompromise use iv acyclovir, vidarabine, or interferon
- (**but suscess is variable**)

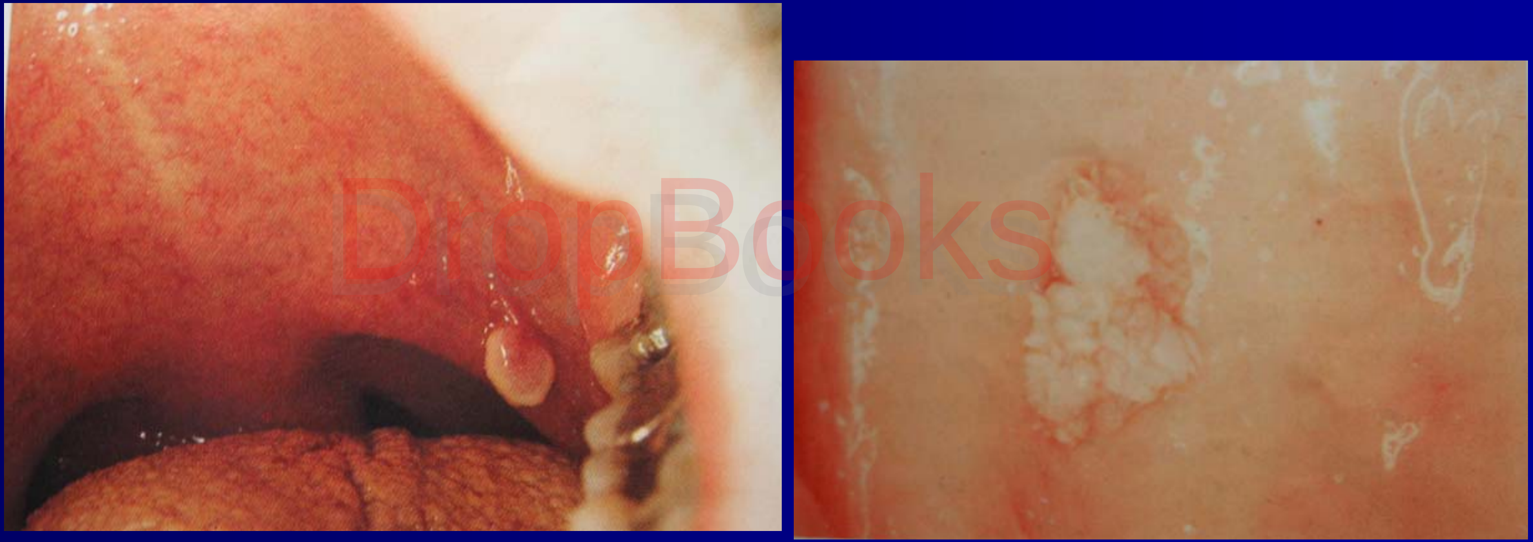
- **4. Infectious mononucleosis**
- Cause: Epstein Barr virus
- Clinical feature: fatique, fever, sorethroat, malaise, enlarged cervical lymphnodes, splenomegaly
- Oral lesion: small ulcers, gingival bleeding & multiple petechiae at junction of hard & soft palates , tonsils enlarge with yellow slough overlying tonsils



- Tx.
- Supportive treatment
- Oral lesion disappear during convalescence

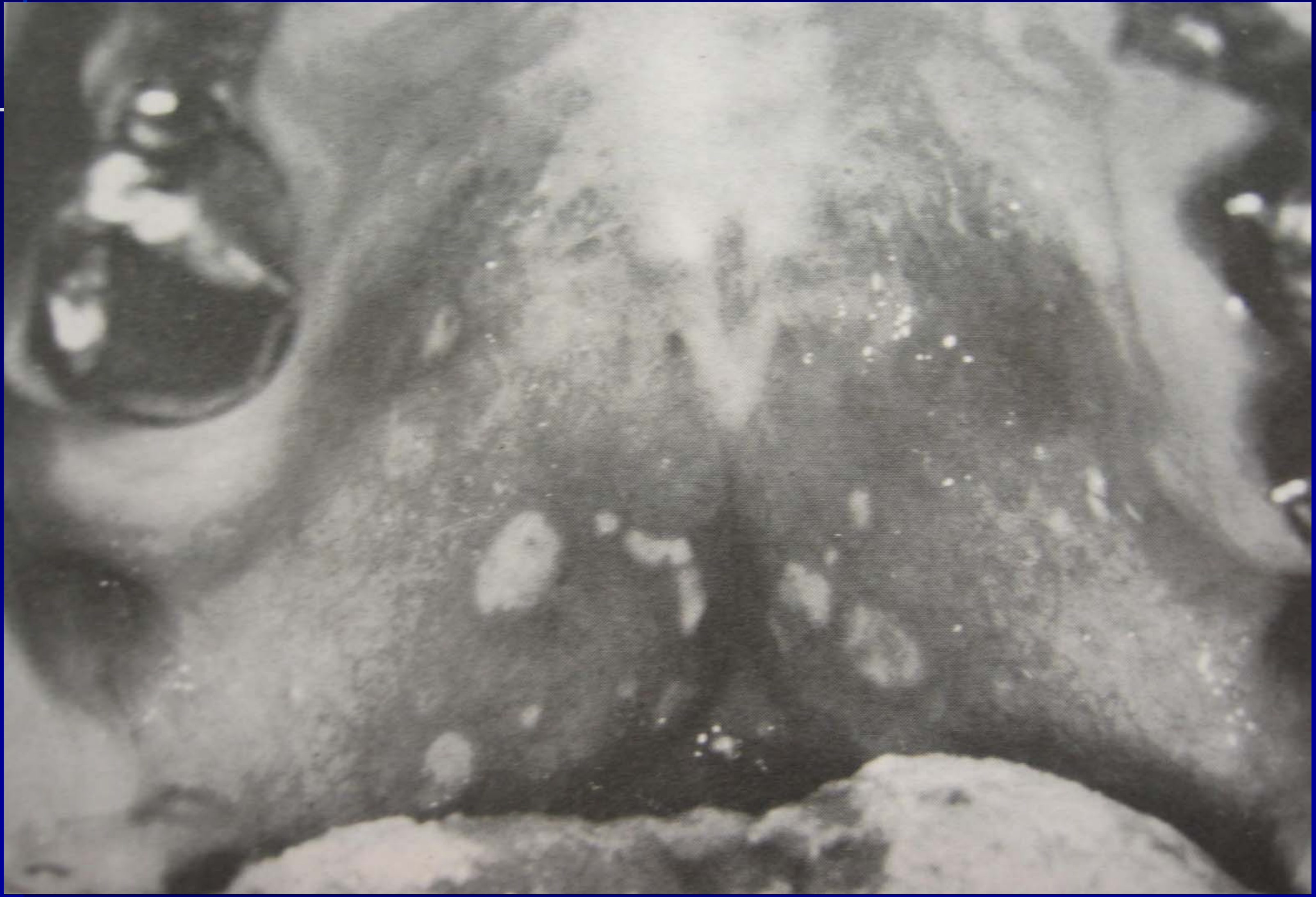
5. Wart

- Cause: papilloma virus
- Clinical feature: single or multiple papillary lesions with thick white keratinized surfaces containing many pointed projections ; cauliflower lesions covered with normal colored mucosa or multiple pink or pale bumps (focal epithelial hyperplasia)



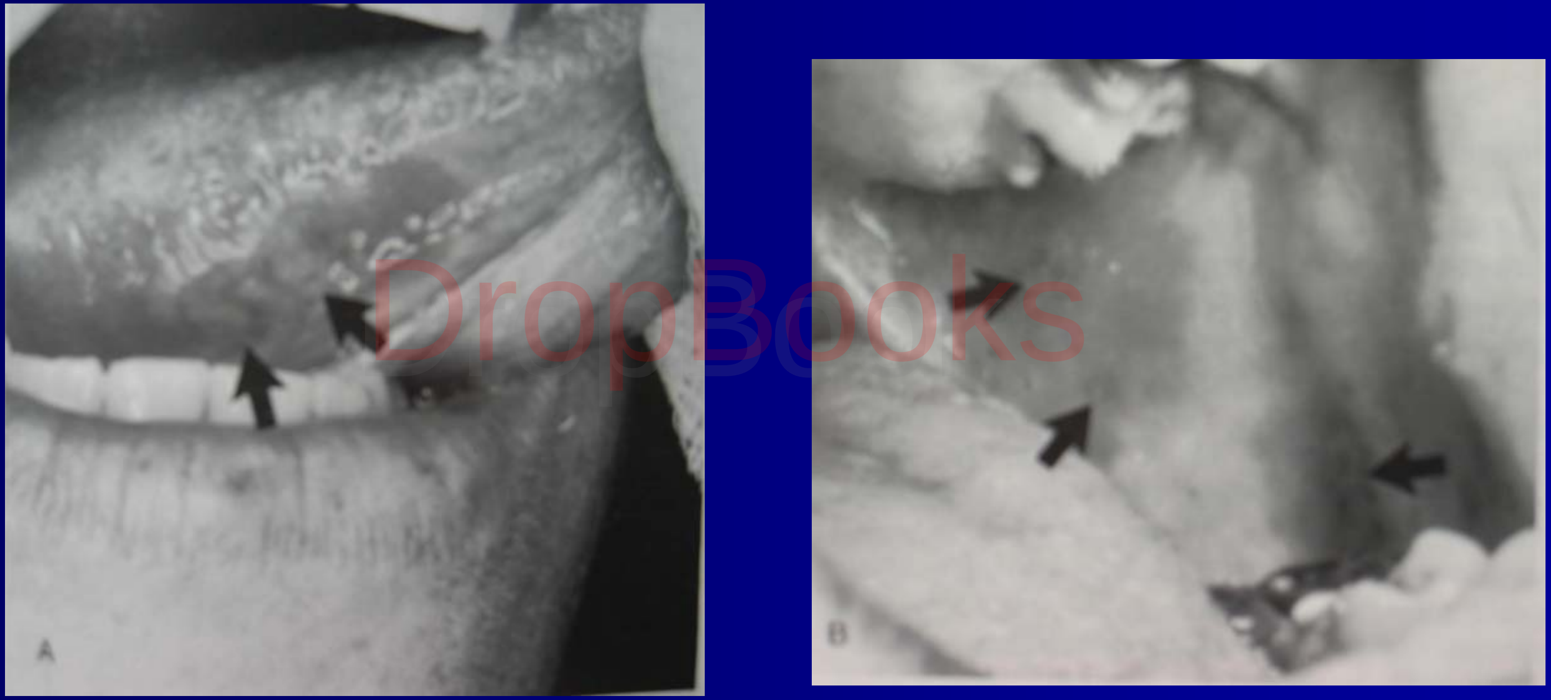
- Usual location: anywhere on skin and oral mucosa
- Tx.
- Cryotherapy with liquid nitrogen , keratinolytic agent (salicylic acid)
- Genital warts use podophyllin solution

- **6. Herpangina**
- Cause: Coxsackie virus (type A1-6, A8, A10, A22, B3 and possibly others)
- Clinical feature: fever,sorethroat
- Intraorally; pharyngitis, vesicular eruption appears on the soft palate, pillars and tonsil

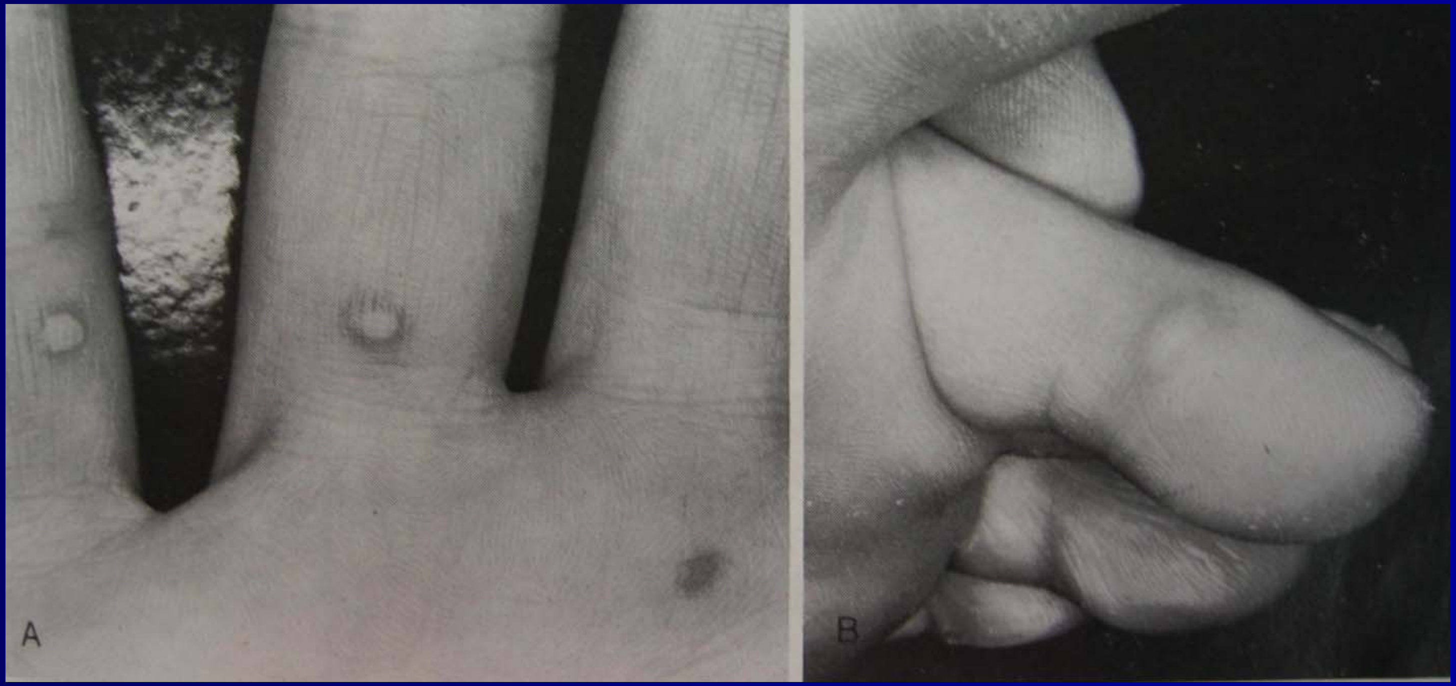


- Self limited, recovery uneventful in about 2 weeks
- Tx.
  - Supportive treatment

- **7. Hand, foot &mouth disease**
- Cause: Coxsakie virus usually type A16
- Clinical feature: multiple vesicles which become painful ,shallow ulcers that are covered by a yellow fibrinous membrane surrounded by erythematous halo



Oral ulcers (arrow)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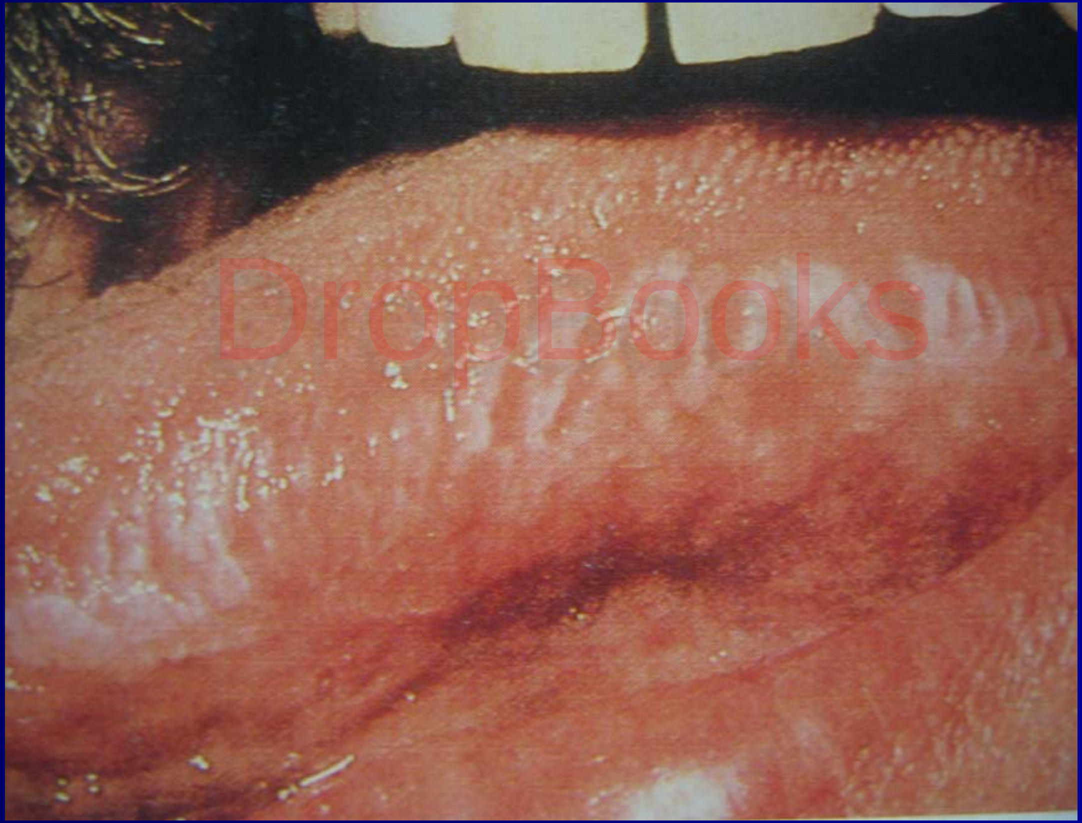
B

- Usual location: anywhere in mouth (palate,tongue,buccal mucosa , pharynx), palms, and soles
- Lesion heal spontaneously in 2-4 wk.
- Tx:
  - Supportive treatment

- **8. hairy leukoplakia**
- Cause: Epstein Barr virus
- Clinical feature: white filiform to flat patch, asymptomatic
- Location: usually on lateral tongue, bilateral , occationally on buccal mucosa

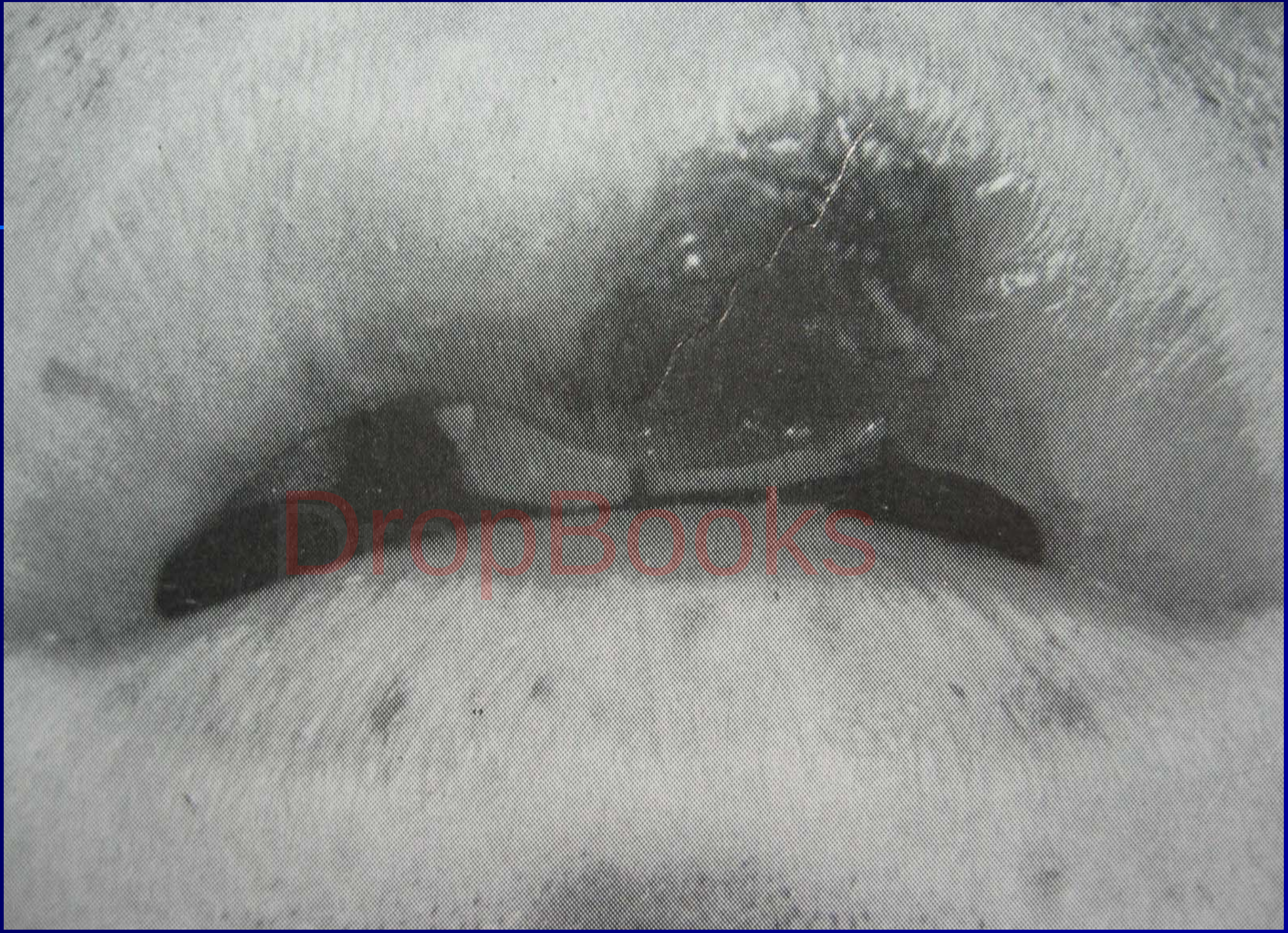


- Pre-AIDS sign , but may occur in nonAIDS immunosuppressed patients rarely
- Tx.
  - No specific Tx.
  - Evaluate for AIDS
  - Responds to high dose acyclovir but may be recurs.

Bacterial infection

- **1. Syphilis**
- Cause: spirochete ‘Treponema pallidum’
- แบ่งเป็น
- 1.primary syphilis
- 2.secondary syphilis
- 3.tertiary syphilis
- 4.congenital syphilis

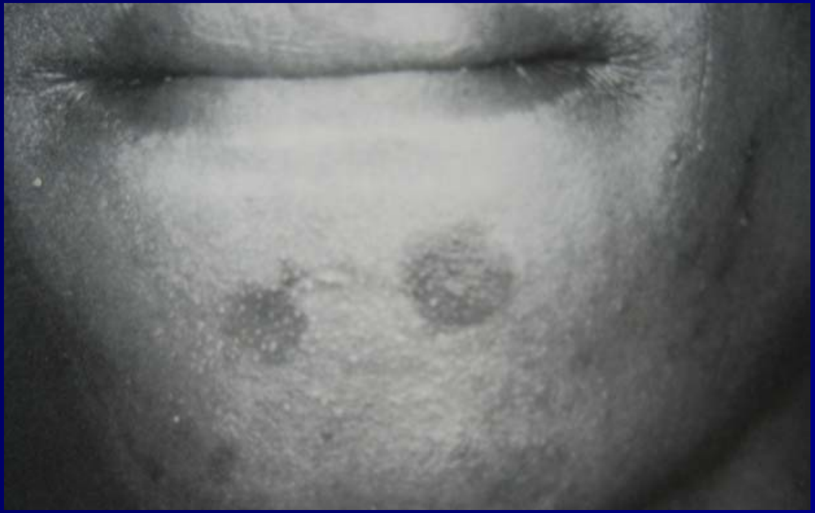
- **1. Primary syphilis (chancre)**
- Clinical feature: small papule develop rapidly into a large, painless ulcer with indurated border at site of spirochete entry
- Location: usually on genitalia , other—lip, tongue, or tonsillar



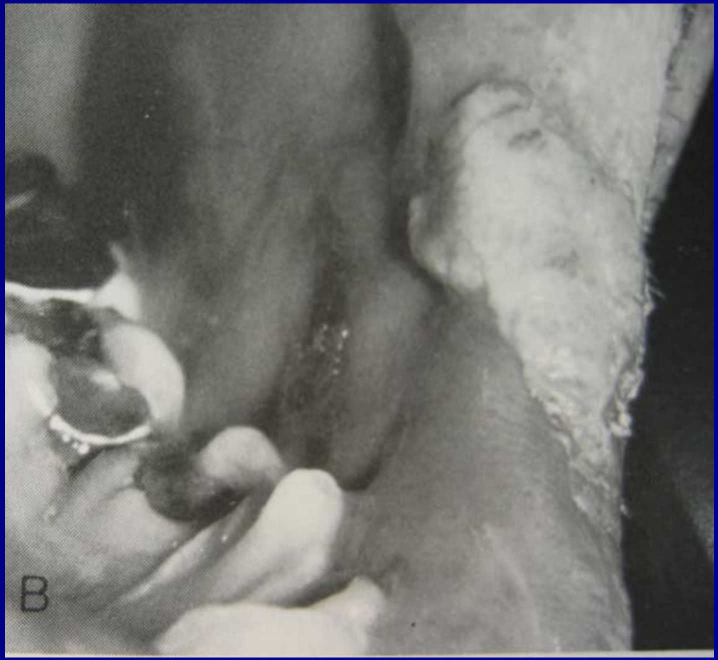
Chronic encrusted ulcer

- Healing of chancre in 1-2 months, followed by secondary syphilis in 6-8 wk.

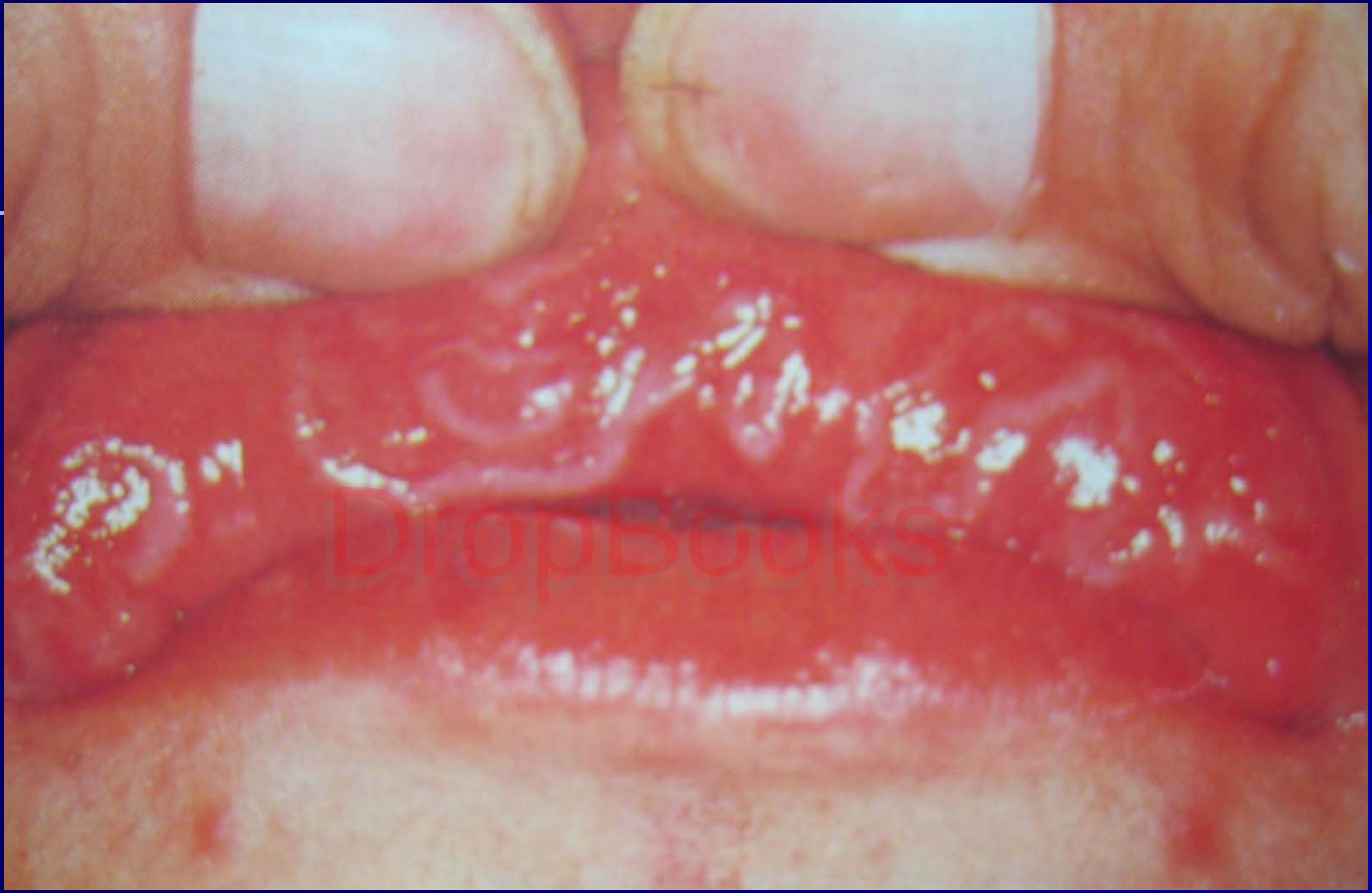
- **2. Secondary syphilis**
- Clinical feature:
- Maculopapular rash on skin
- Oral mucosa: maculopapular 5-10mm., multiple ulcers covered by mucous patch, elevated broad based plaques known as condyloma lata
- Location: oral mucosa usually involve palate, commissures of mouth



Macular lesion



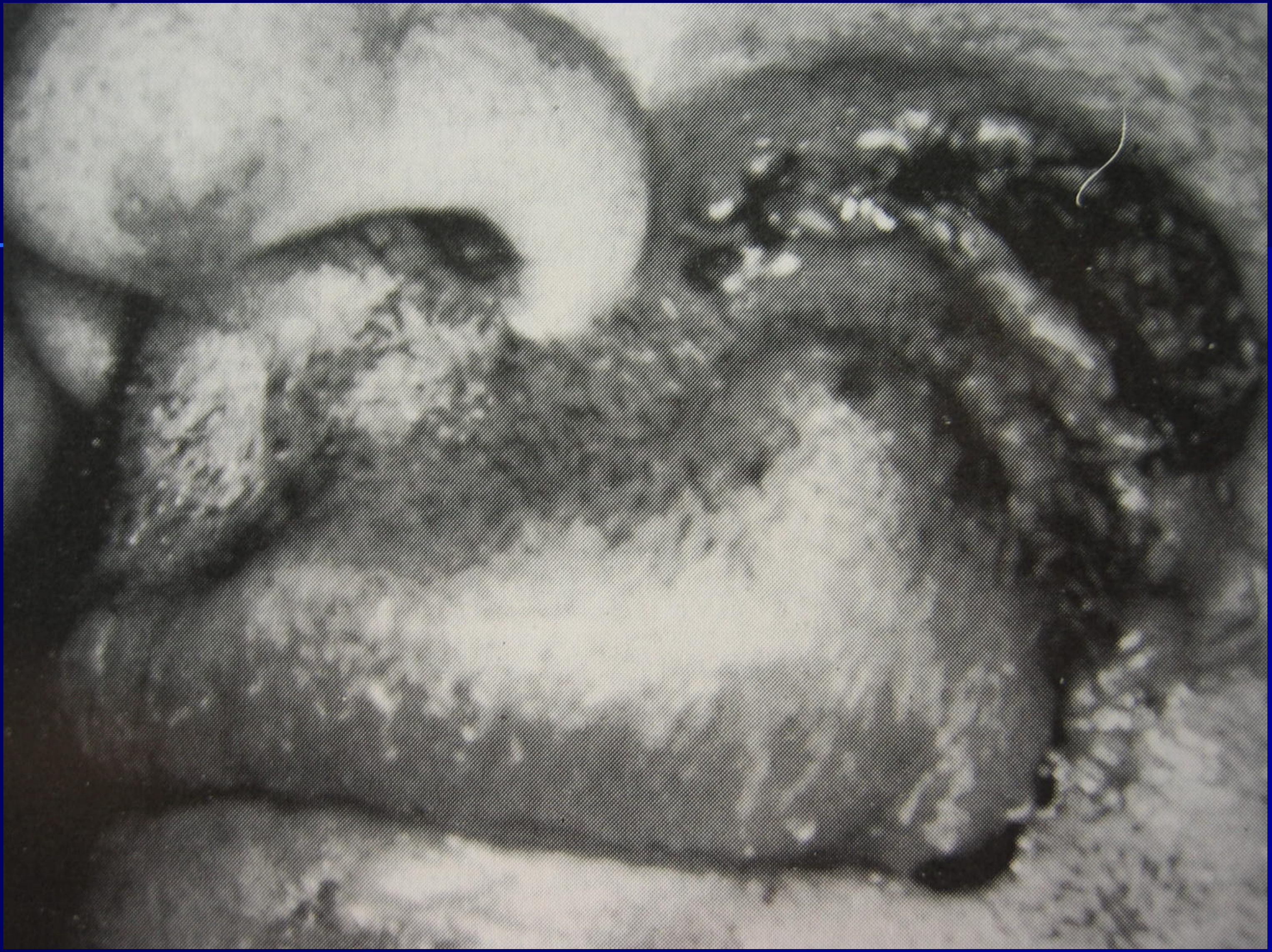
Condyloma latum



Oral mucous patchs or “snail track” ulcers

- Lesion may persist from several weeks to a year before spontaneous remission occur

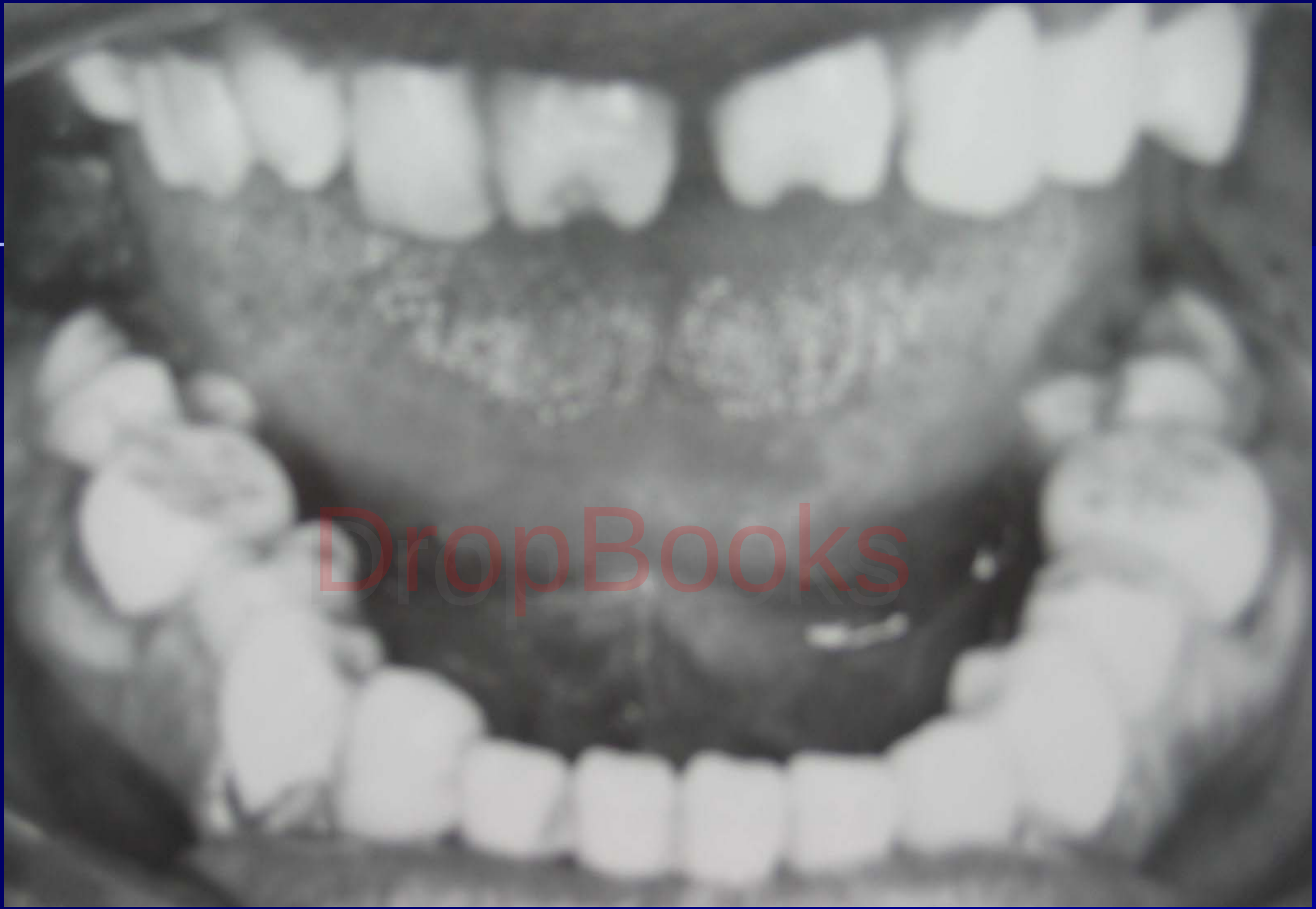
- **3. tertiary syphilis**
- Clinical feature: gummatous infiltration of palate or tongue followed by ulceration and fibrosis, atrophy of tongue papillae produces bald tongue and glossitis
- Syphilitic glossitis have a predisposition for the development of SCCA



Gammatous inflammation

- **4. Congenital Syphilis**
- May result in fetal abortion or numerous inflammatory & destructive lesion in various fetal organs.
- Clinical feature: gummatous involvement of palate, jaws, and facial bones , Hutchinson’s triad

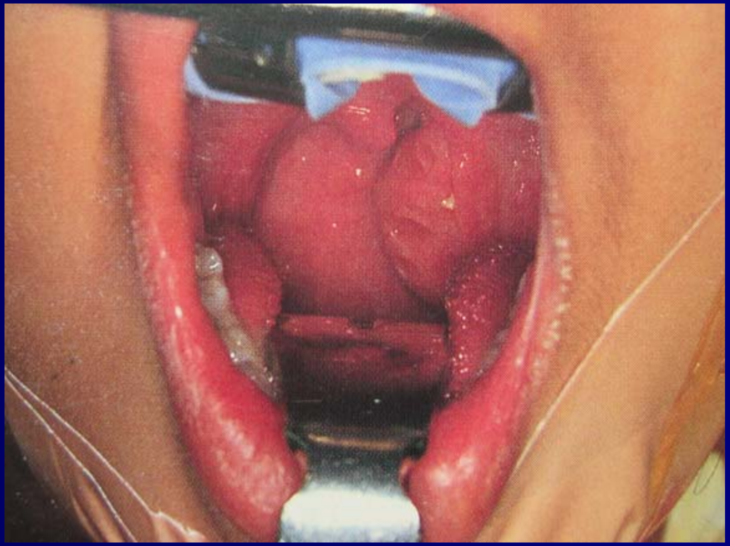
- **Hutchinson’s triad
- -late stigmata of congenital syphilis
- 1.interstitial keratitis
- 2.deafness
- 3.dental abnormal (mulberry molars, notched incisors)

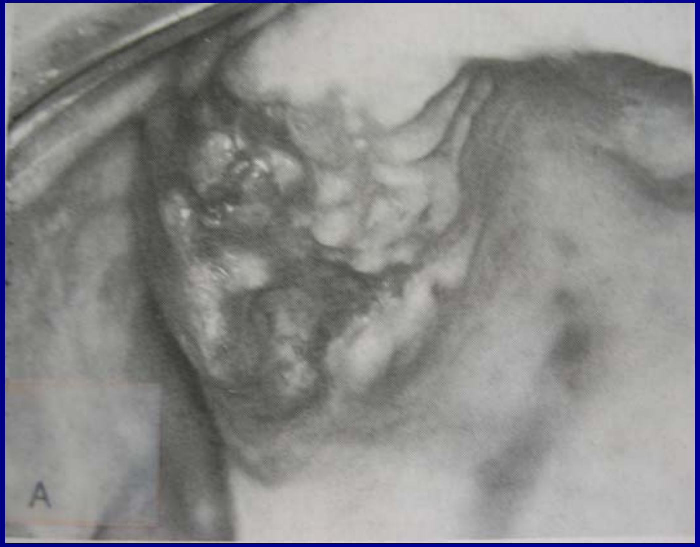


Notched incisors and mulberry molars, part of Hutchinson’s triad

- Tx.
  - – Drug of choice for treatment all stages of Syphilis is peniciliin G benzathine
  - – *primary syphilis, secondary, or early latent --- 2.4 mu IM single dose
  - – *late latent or tertiary syphilis --- 2.4 mu IM weekly for 3 weeks
  - – Other– erythromycin , tetramycin

- **2. Tuberculosis**
- Cause: Mycobacterium tuberculosis
- Clinical feature: chronic ulcer, irregular ulcer covered by a persistent exudate, firm border, maybe painful
- Location: tongue, tonsillar area, soft palate

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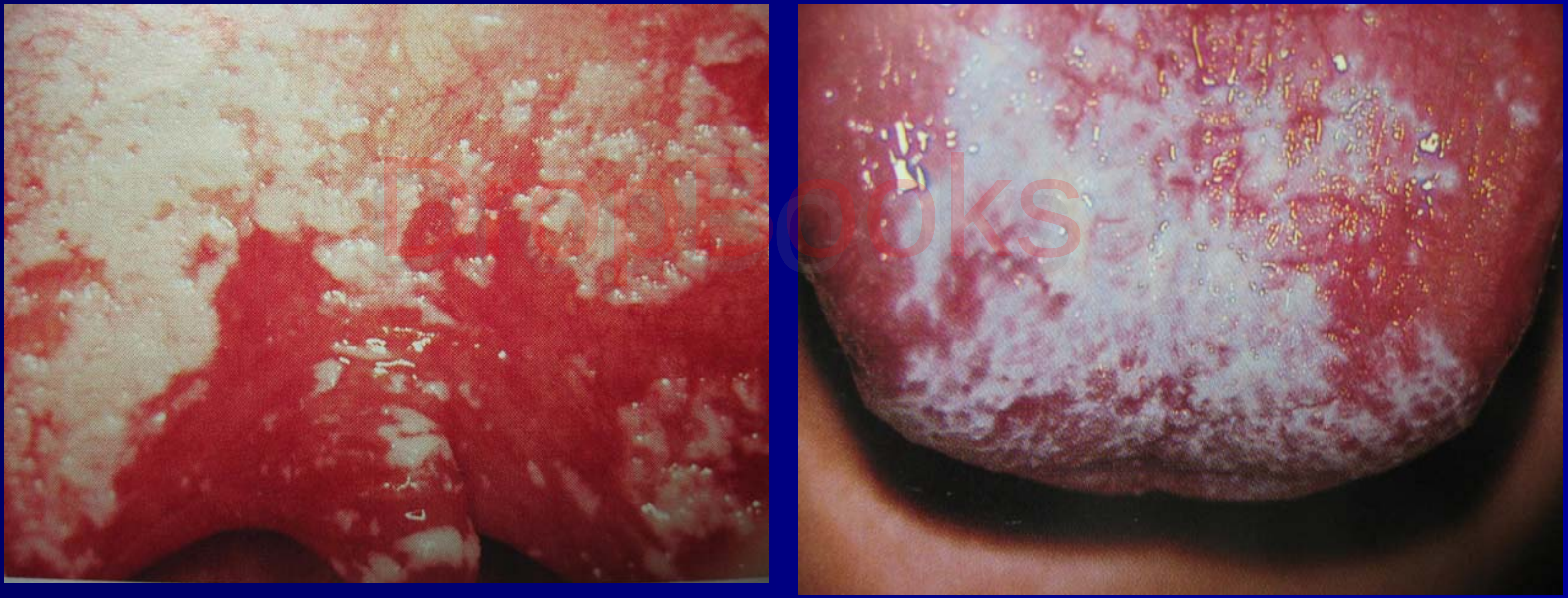
- Most always secondary to lung lesions
- Tx.
  - Anti TB drug—Isoniazid, rifampicin, streptomycin, ethambutal
  - Tx. May be extended as long as 2 years

Fungal infection

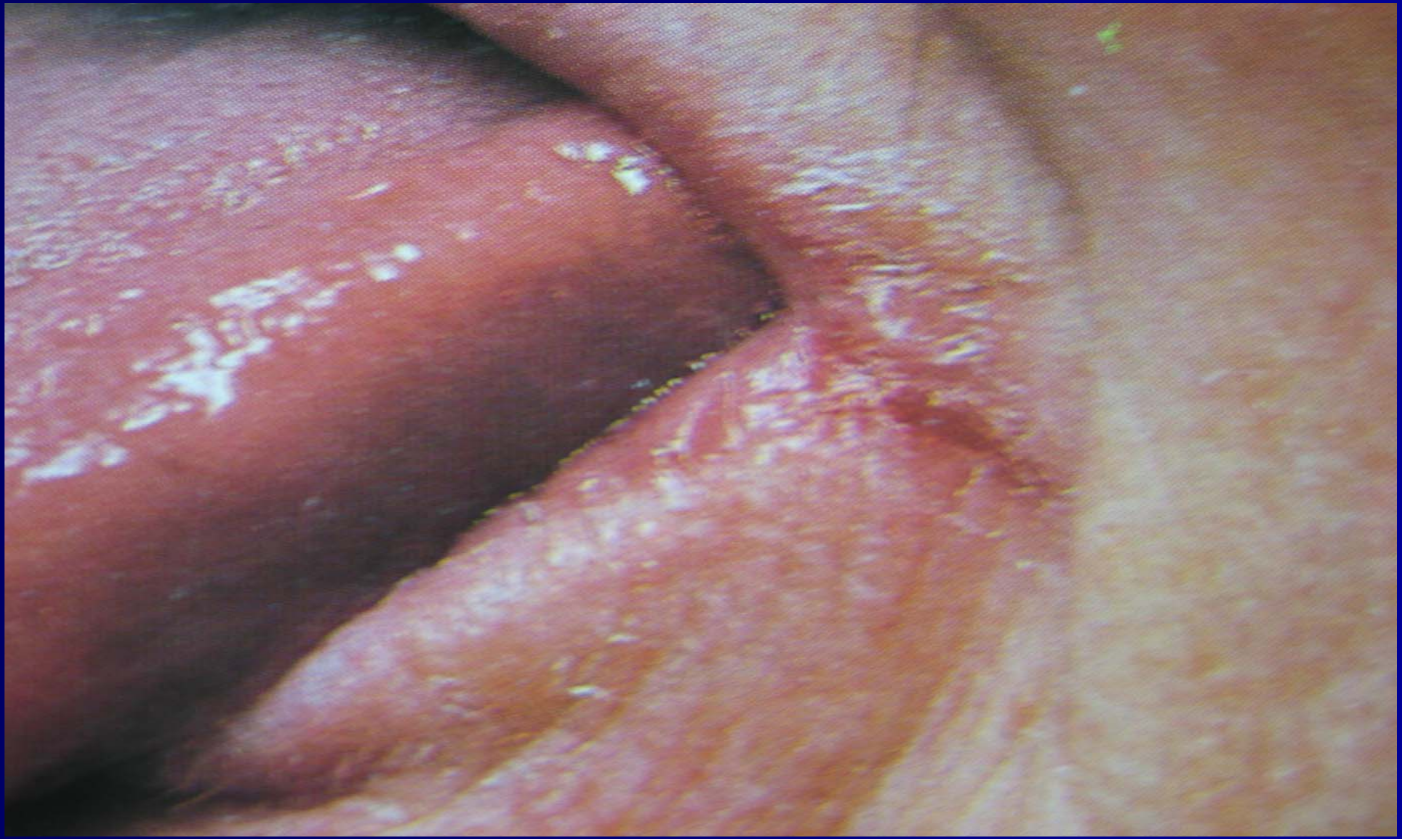
- **1. Candidiasis**
- Cause: Candida albicans
- Clinical feature: pseudomembranous form has white patches, easily wiped off leaving red, bleeding, painful
- Location: any area of oral mucosa



DrugBooks

- Angular cheilitis – candida involve sore cracks at angle of mouth

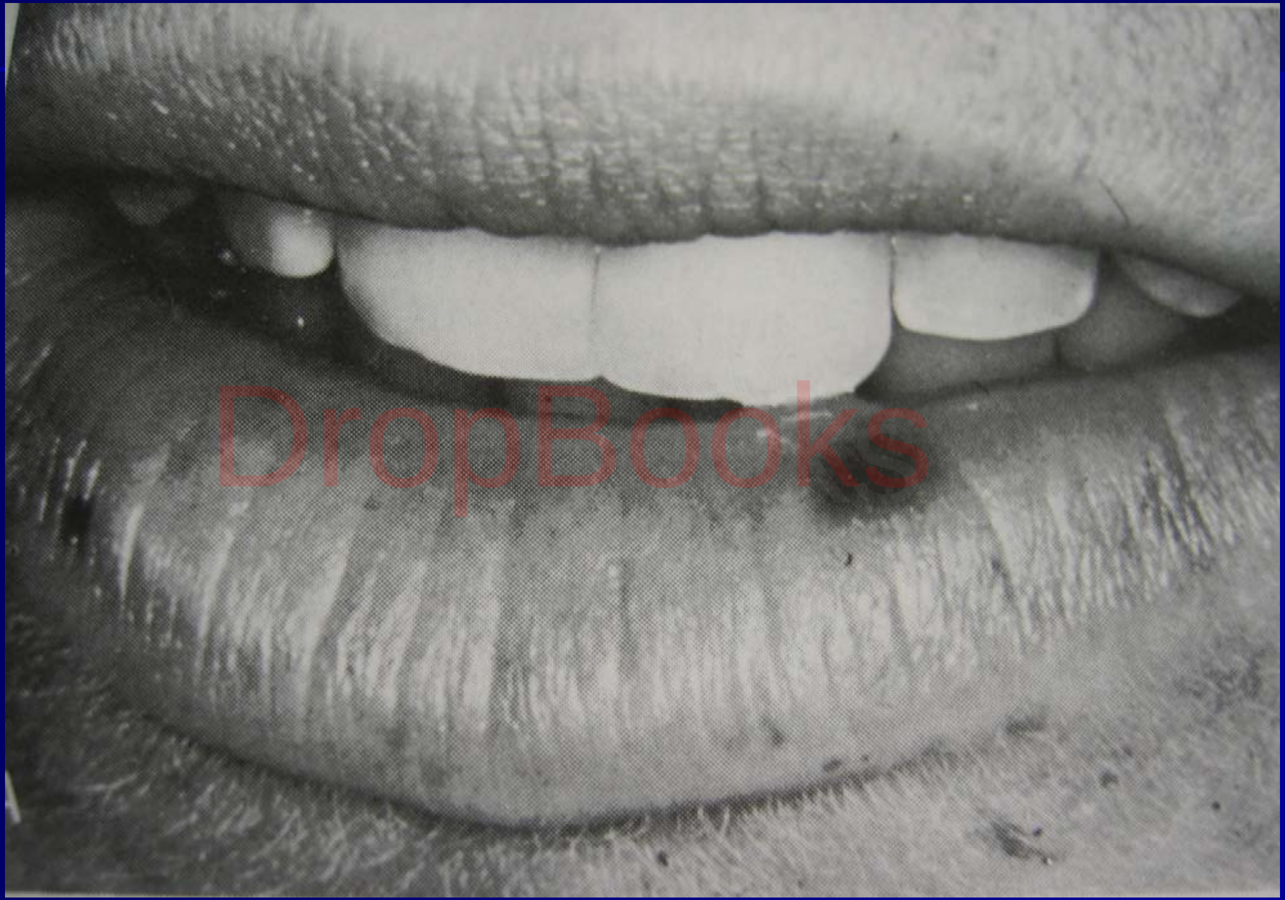
Lesion are moderate painful, fissured, eroded, and encrusted



- Associated with poor hygiene, systemic ATB, systemic disease, immunocompromise
- Tx.
  - – Topical Nystatin or Clotrimazole
  - – And treatment of underlying disease
  - – Chronic candidiasis associated with immunosuppression– systemic Amphotericin B, ketoconazole, or fluconazole may be necessary

Pigmented lesion

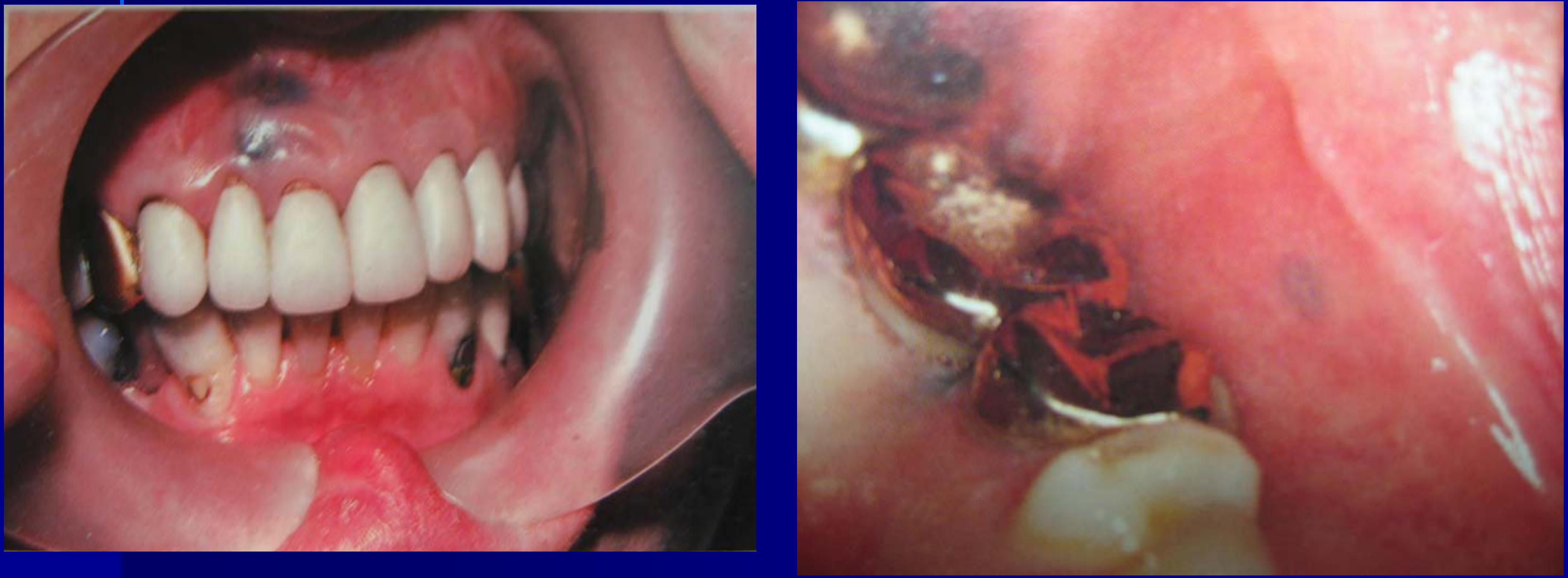
- **1. oral melanotic macule**
- Cause: unknown, post inflammatory, trauma, associated with Peutz-Jeghens syndrome or Addison’s disease
- Clinical feature: flat, oral pigmentation brown to black macule less than 1 cm. in diameter
- Location: any area of the mouth



- Tx.
  - Excision may be required to rule out melanoma

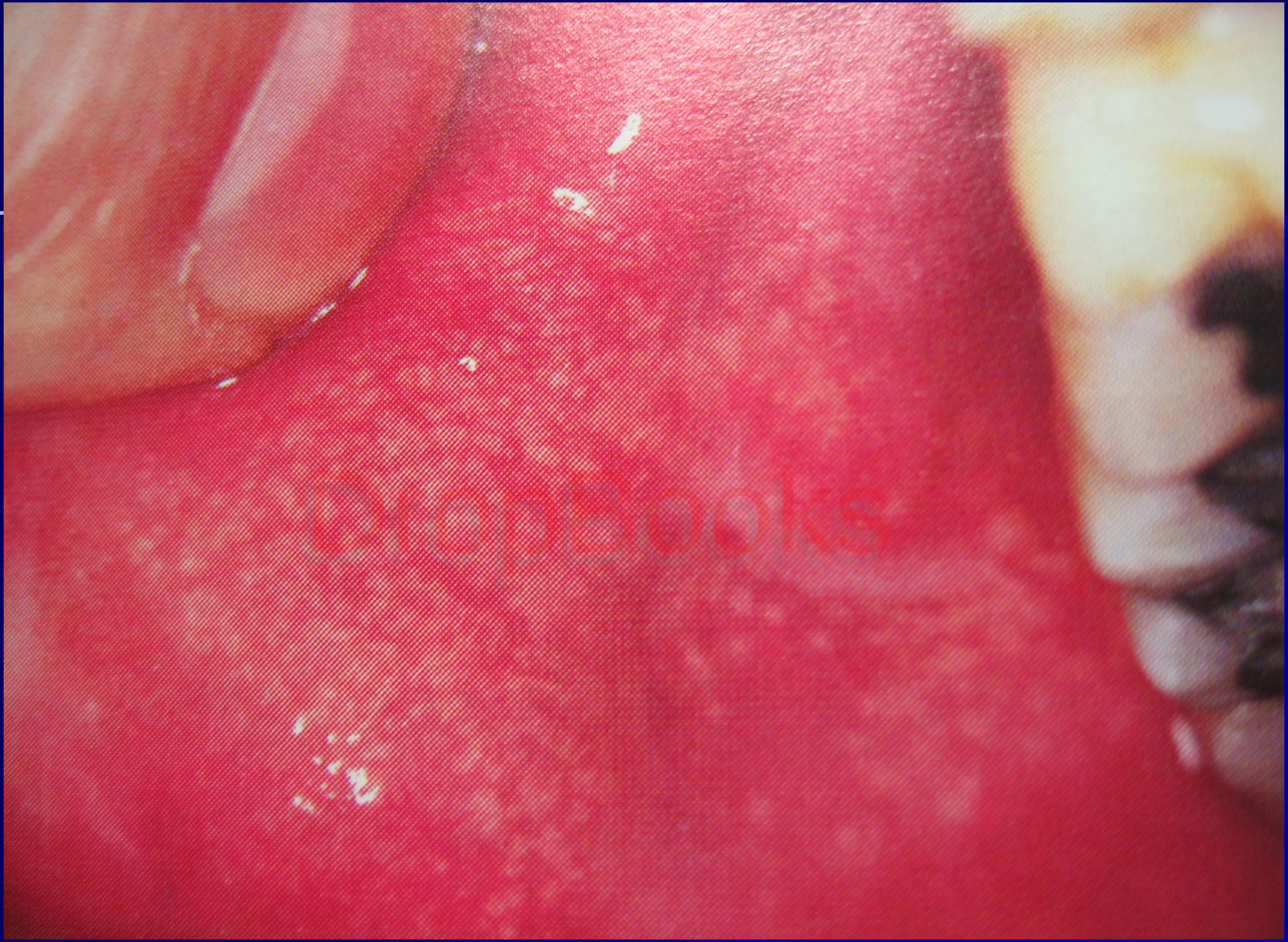
2. Amalgam tattoo

- Cause: traumatic implantation of amalgum
- Clinical feature: asymptomatic, gray pigmented found in gingiva , tongue, palate, or buccal mucosa adjacent to amalgam restoration



- May be show up on radiographs as radiopaque particles
- Tx.
  - Observe or excision if cannot be rule out melanoma

- **3. Fordyce’s spot**
- Cause: ectopic sebaceous glands (normal tissue in an abnormal location) (variation)
- Clinical feature: multiple, asymptomatic, yellow flat or elevated spot
- Location: buccal mucosa and lip

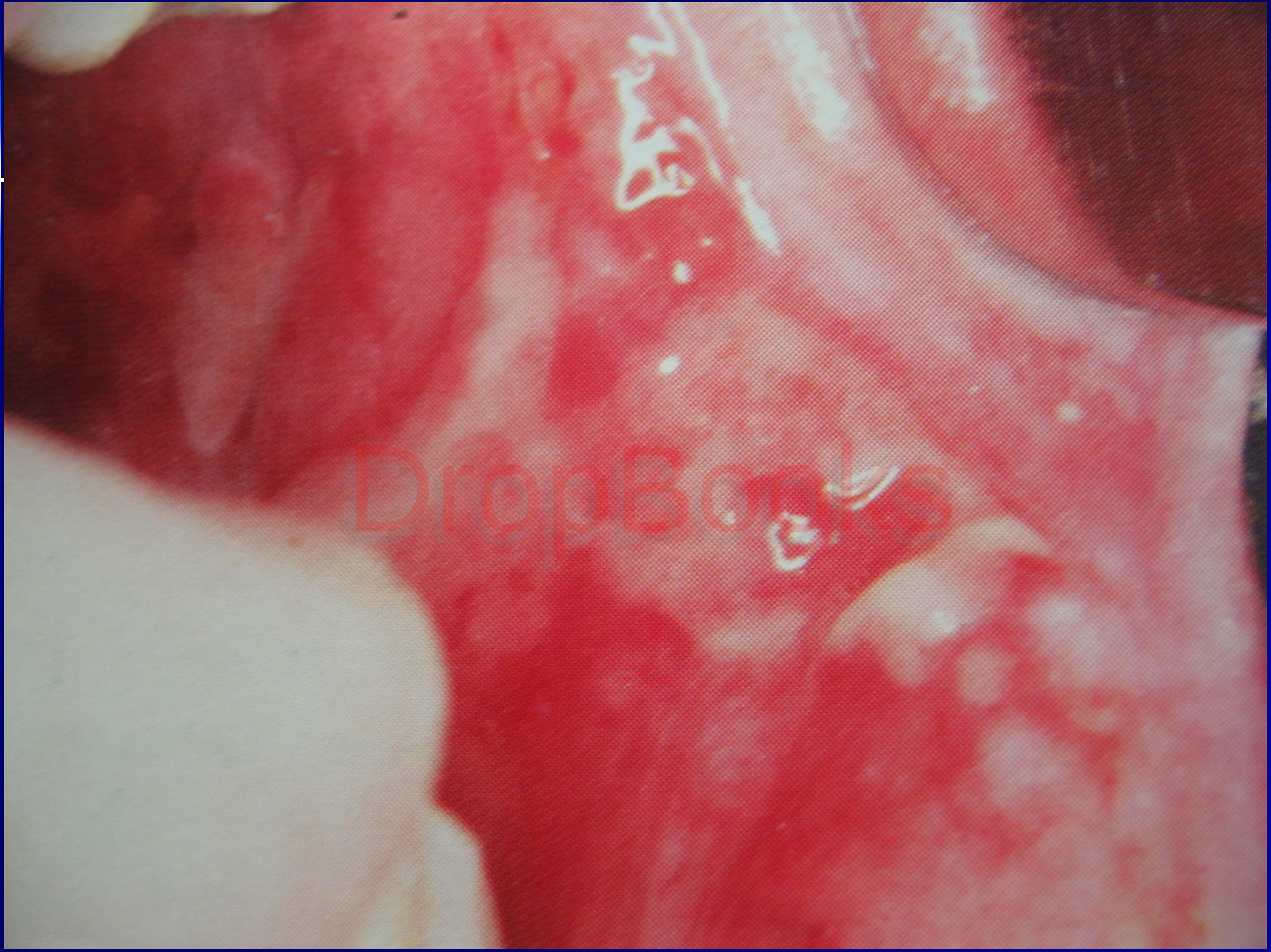


- Tx.
- None
- Lesion are diagnostic clinically and should not be biopsied
- Remains without appearent change indefinitely

Dermatologic disease

- **1. Mucous membrane pamphigoid**
- Cause: autoimmune ; Ab directed against basement membrane area
- Is a chronic mucocutaneous bullous disease

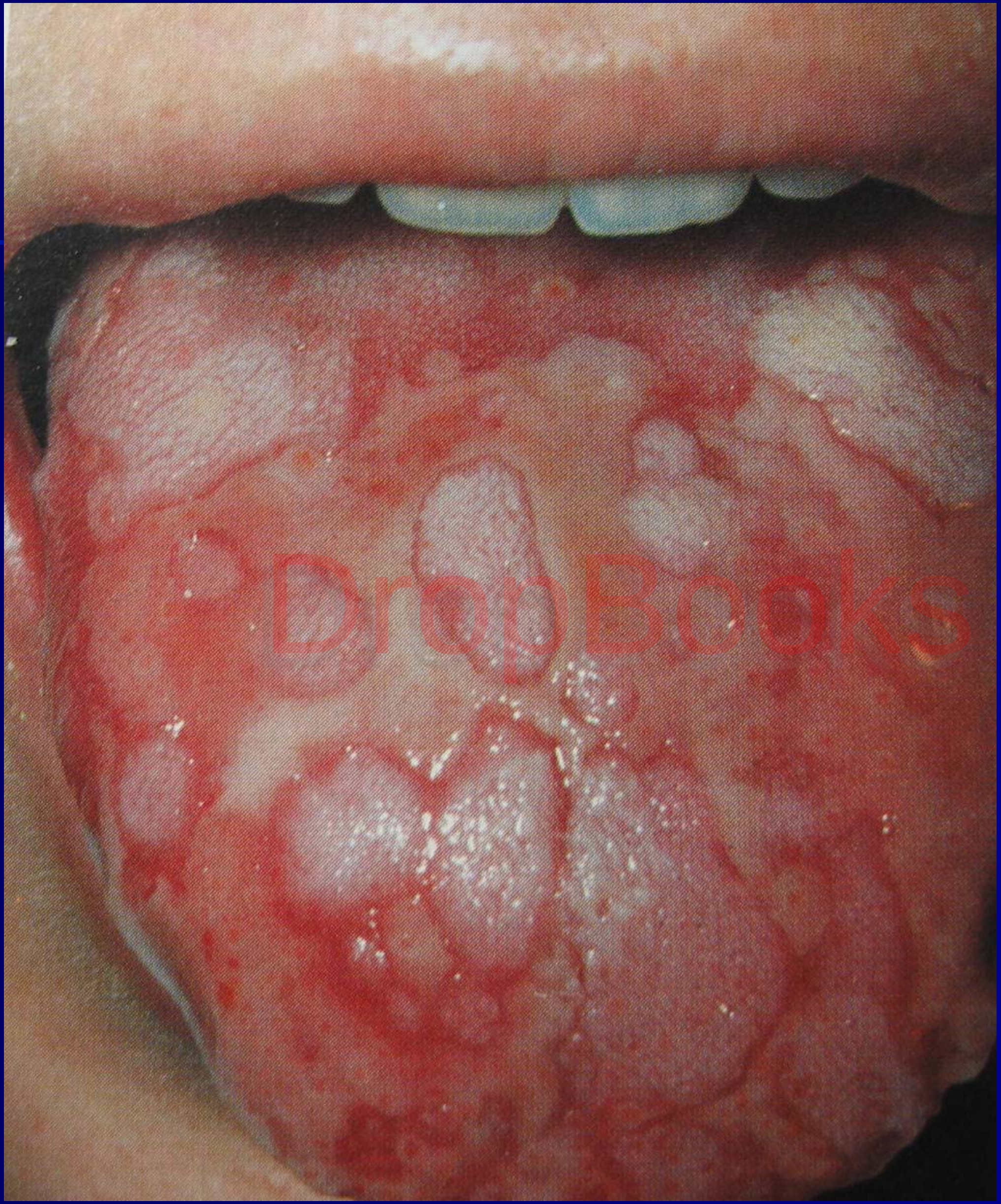
- Clinical feature: painful, grayish white collapsed vesicles or bullae with peripheral erythematous zone and precede painful ulcers
- Nikolski's sign positive
- Location: mucous membrane of oral cavity, but may involve eyes, urethra , vagina , and rectum



- Lesion may heal with scar
- Tx.
  - Topical or systemic steroid

- **2. erythema multiforme (Stevens-Johnson syndrome)**
- Cause: unknown , Hypersensitivity reaction is suspected , may follow drug ingestion or an infection such as herpes labialis or Mycoplasma pneumonia

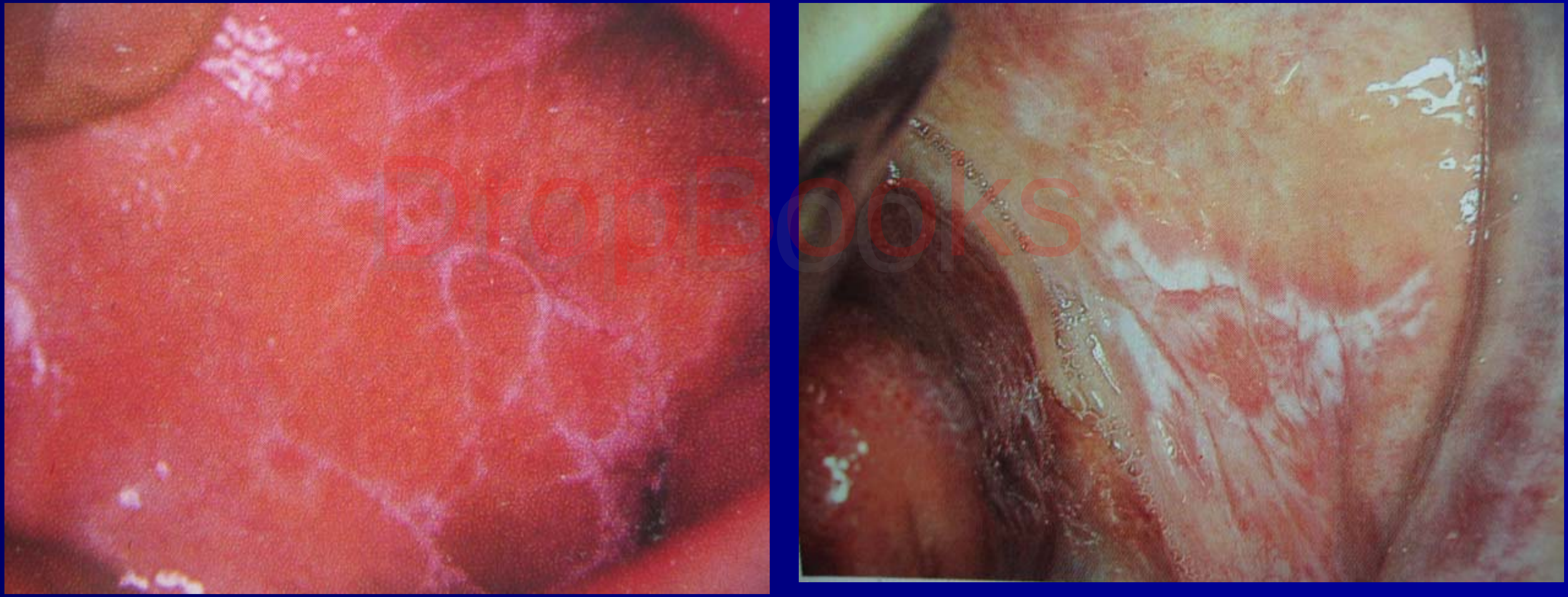
- Clinical feature:
- Cutaneous and mucosal lesion
- Lips may show hemorrhagic crusts
- Oral mucosa – bullae---painful ulcer
- Ocular inflammation –conjunctivitis, uveitis
- Skin– target lesion (pathognomonic sign) **concentric erythematous rings seperated by rings of near-normal color.

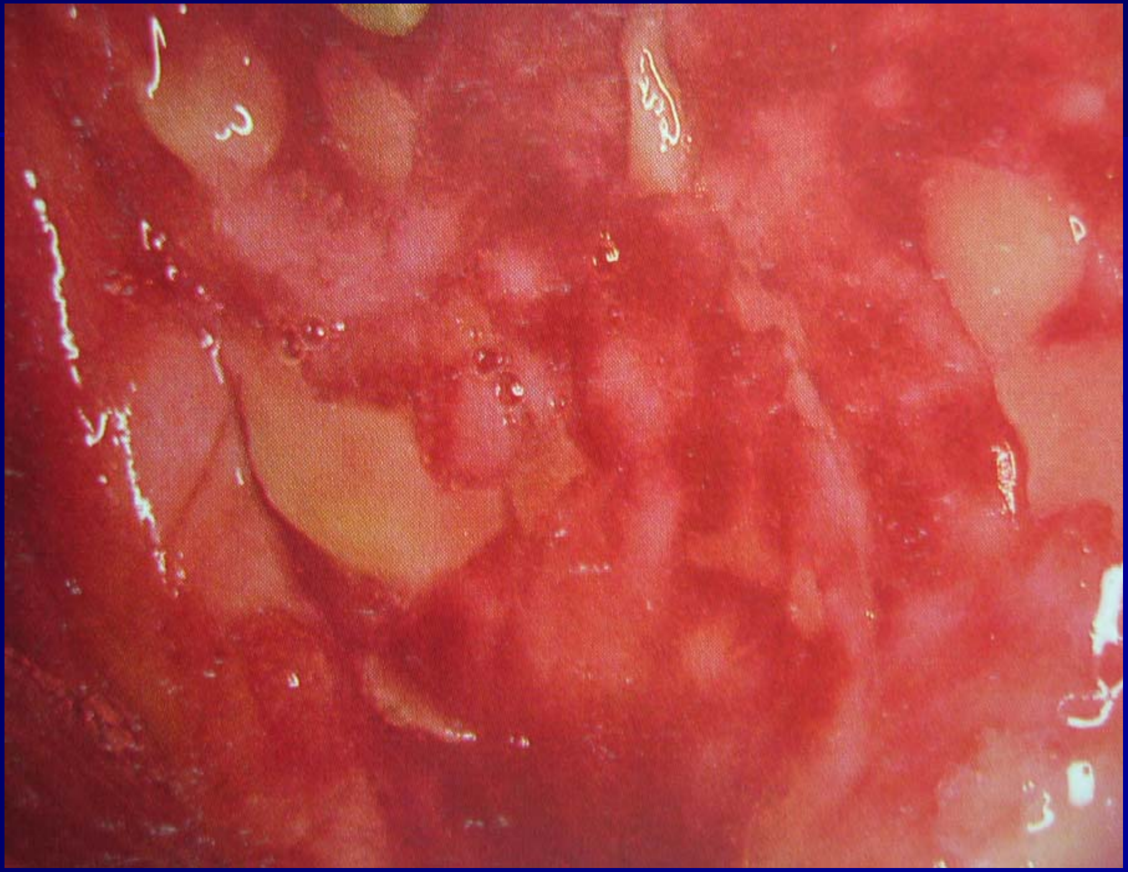


- Tx.
- Symptomatic treatment
- In severe case
  - Systemic corticosteroid and supportive measures– oral irrigation, adequate fluid intake, and antipyretics.

- **4. Lichen planus**
- Chronic mucocutaneous disease
- Cause: Unknown , may be precipitated by stress, may be hyperimmune condition mediated by T cell

- Clinical feature:
- oral– white striae in mouth, occational causes oral ulcers and erosive gingivitis
- Location: buccal mucosa, tongue, gingiva and palate
- Skin– purple, pruritic papule
- Location: forearm, lower leg





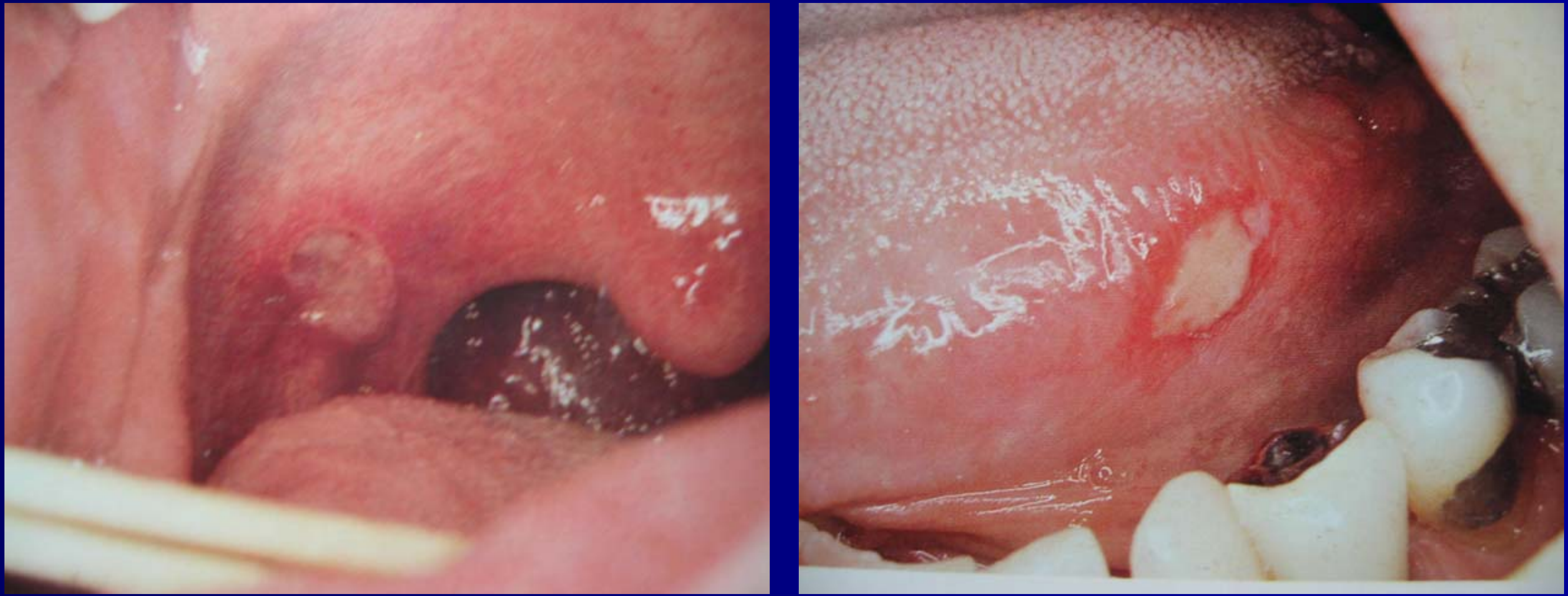
Well defined areas of extensive ulceration on buccal mucosa

Tx.

- Topical or systemic steroids
- Retinoids may helpful with or instead of steroids
- *May regress after many years
- *treatment may only control disease
- *rare malignant transformation

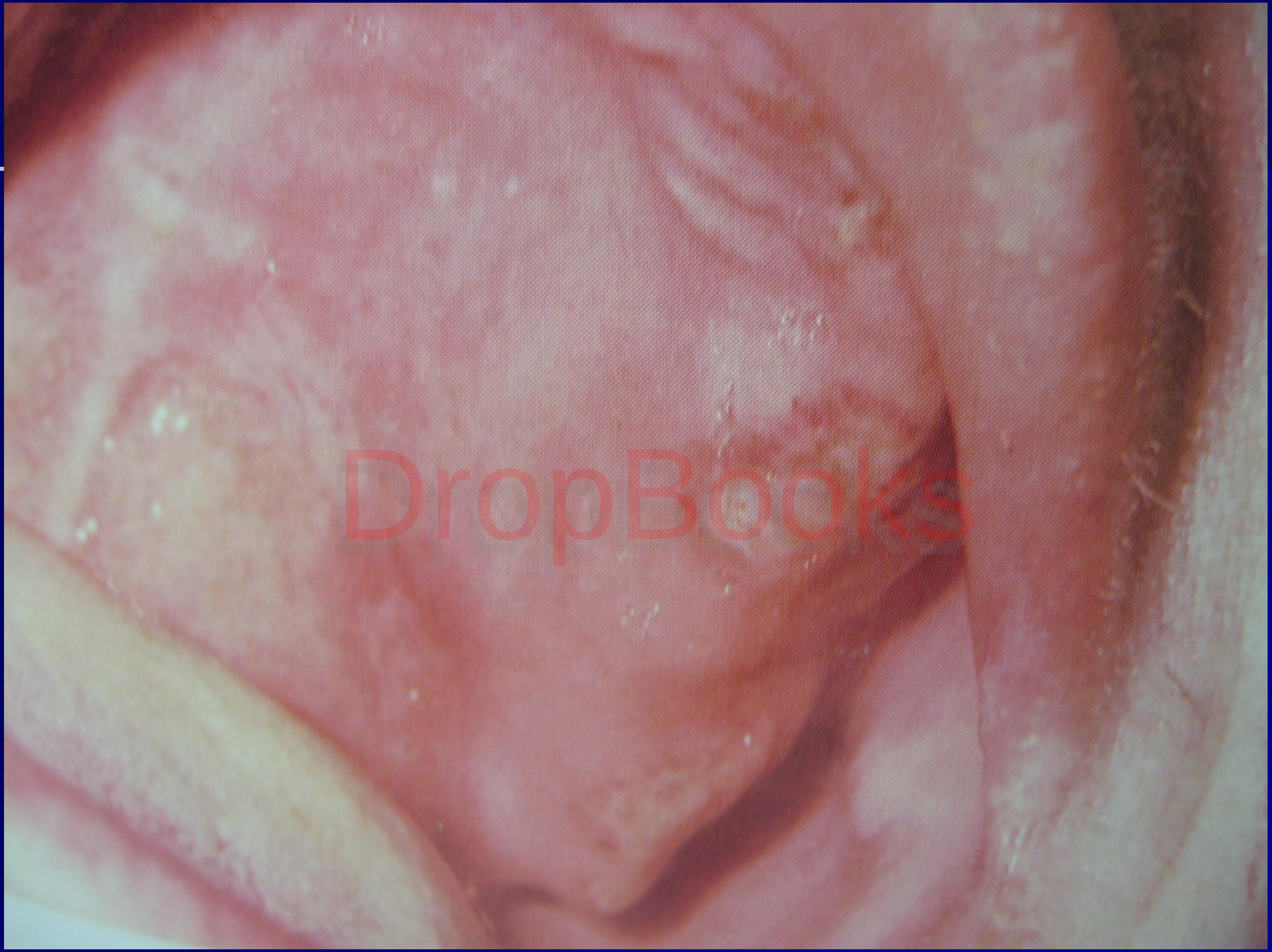
- **5.Apthous ulcers**
- Cause: unknown, probably an immune defect mediated by T cell
- Not caused by virus
- Precipitated by stress, trauma, other factors

- Clinical feature: recurrent, painful ulcers, usually round or oval shape, with yellow fibrin-covered base surrounded by red halo, ulcers not proceded by vesicle
- **Minor type**-- solitary, <0.5cm., 7-10days , heal without scar
- **Major type** -- severe, >0.5cm., heals in up to 6 wk. , with scar
- **Herpetiform type** – multiple, recurrent crops of ulcers, 1-2mm., heals in 1-2 wk.

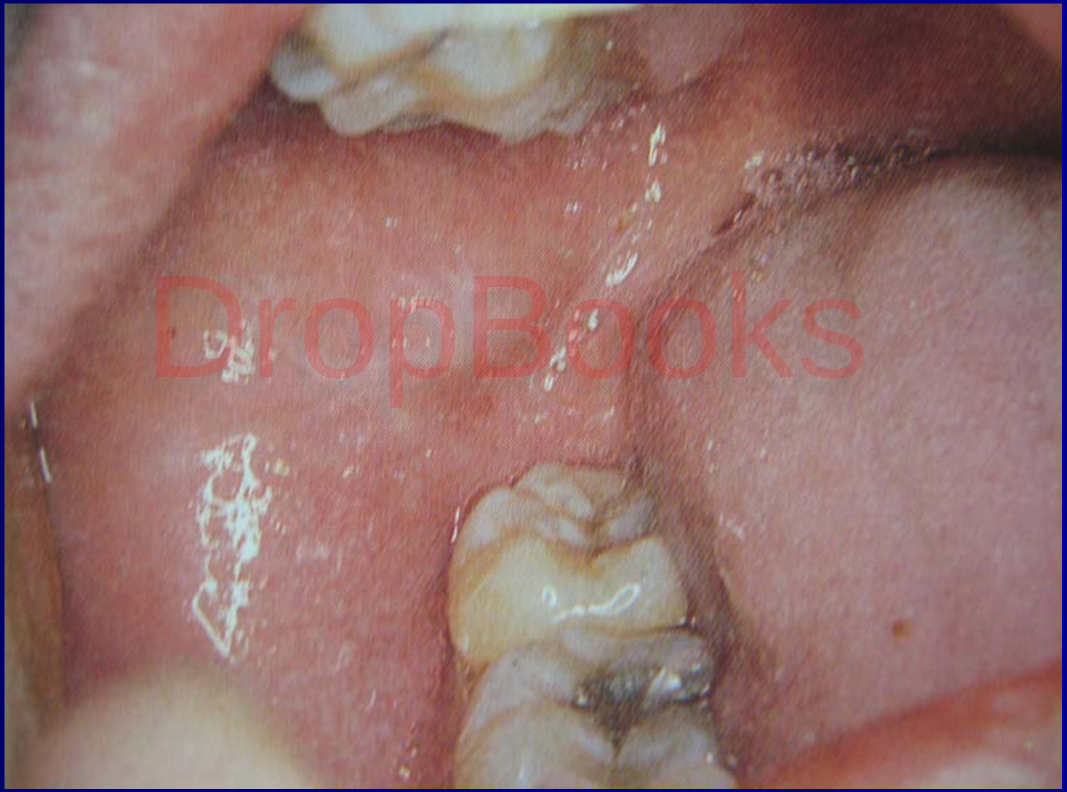


- Location: buccal mucosa ,tongue, floor of mouth, soft palate, oropharynx , lips
- Tx.
  - Topical steroids
  - Systemic steroids for severe disease --- low to moderate dose of prednisolone (20-40 mg/day for 1 wk follow by another week at half the initial dose)

- **6.behcet’s syndrome**
- cause: unknown, probably an immune defect
- Clinical feature: multiple aphthous ulcers in mouth , inflammatory ocular changes, ulcerative lesion on genitalia, inflammatory bowel disease and CNS disease
- Tx: steroid , immunosuppressive



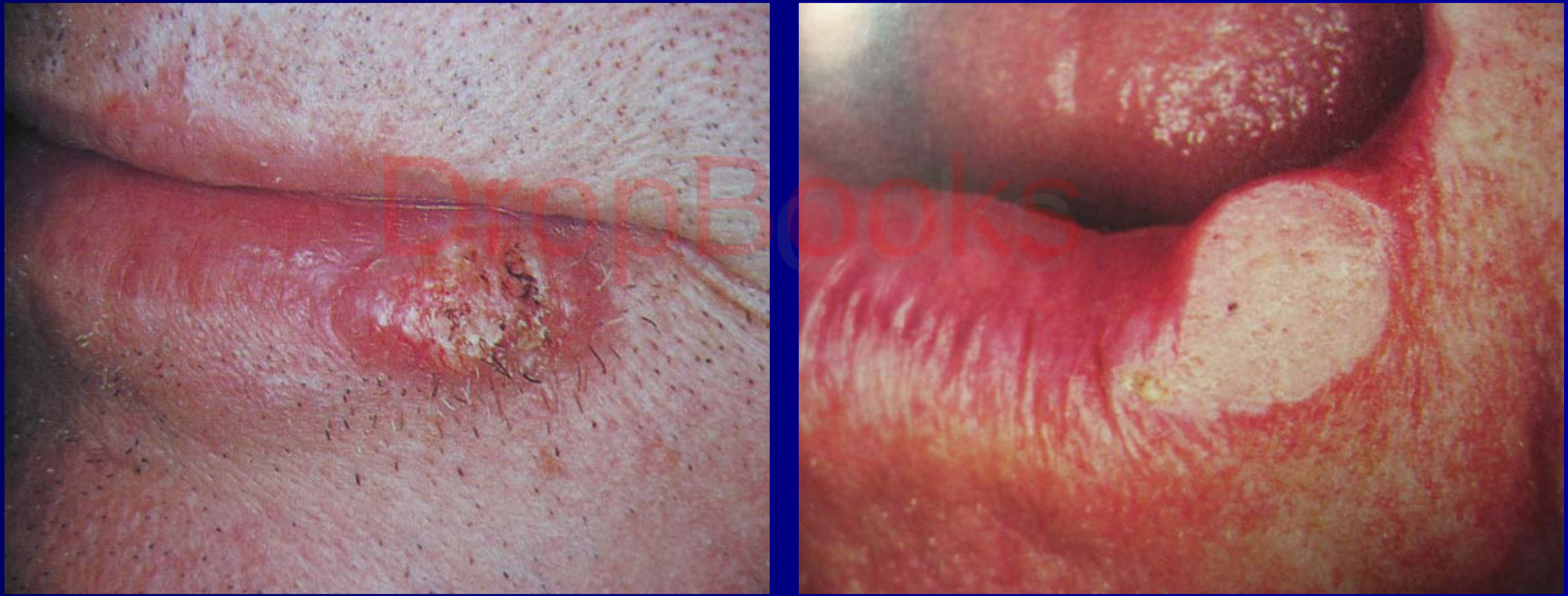
- **7. Traumatic ulcer**
- Cause: accidental biting of mucosa , penetration by a foreign object, or chronic irritation by a denture
- Clinal feature: localized, discrete ulcerated lesion with red border



- Location: anywhere in oral mucosa
- Tx.
  - Lesion usually heal in 7-10 days when irritant is removed, unless secondarily infection

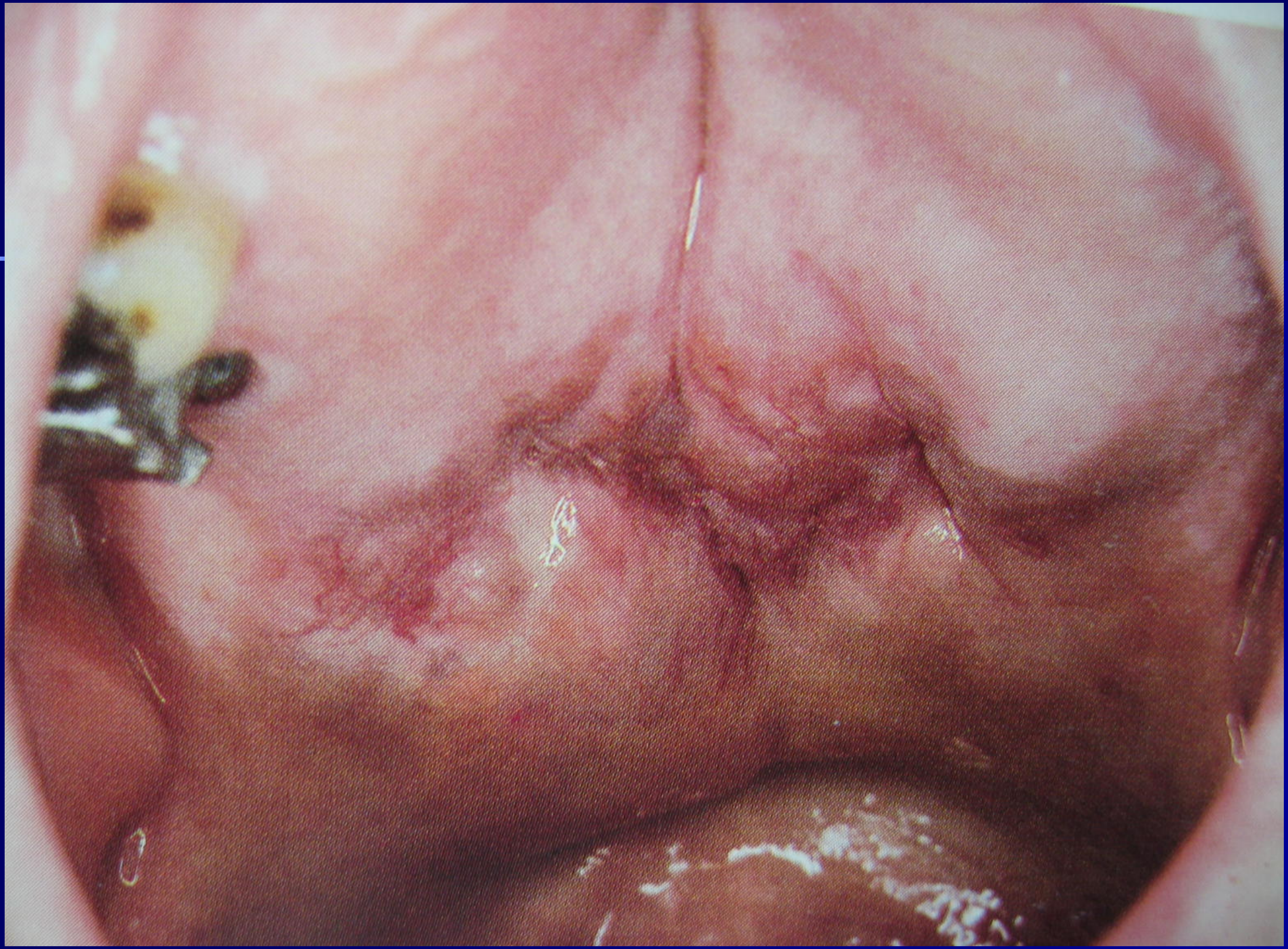
- **7. Squamous cell carcinoma**
- Cause: unknown
- Carcinogen: tobacco, UV light, some microorganism (Candida albican , T. pallidum , EBV , HSV, HPV) , alcohol, chronic irritation

- Clinical feature: ulcer with elevated, indurated border, failure to heal, not painful, lesion tend to arise in areas of leukoplakia or in smooth or atrophic tongue
- Location: any area of mouth , most commonly on lower lip, tongue, and floor of mouth



- Invades and destroys underlying tissues and may metastasis to regional lymph node
- Tx.
  - Surgery or radiation

- **8.lymphoma**
- Clinical feature:
  - Asymptomatic
  - Spongy to firm tumescence of hard palate
  - elevated , ulcerated area which may proliferate rapidly
  - Location: gingiva , palate, tongue , and tonsillar area
  - Tx. radiation



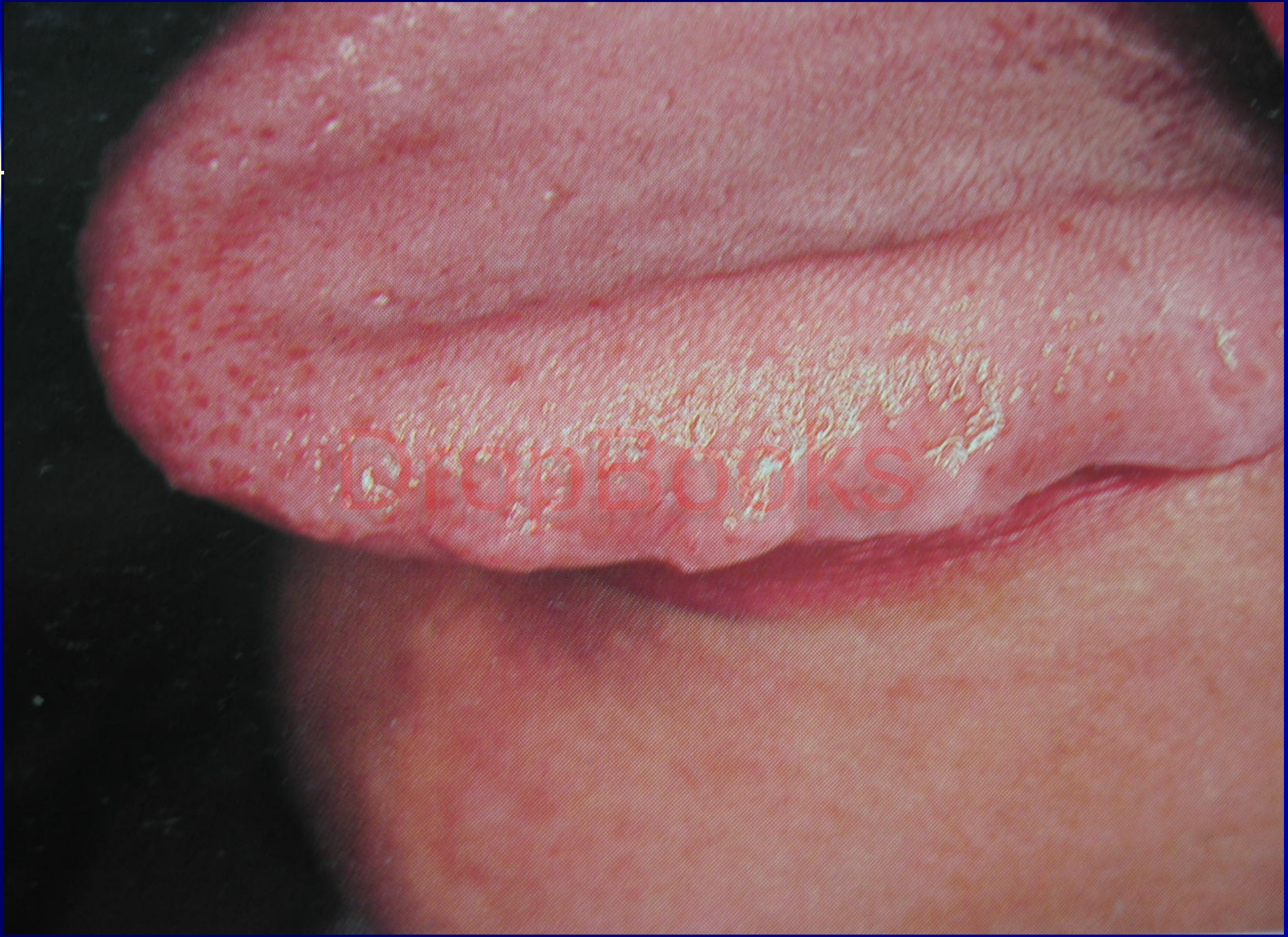
Diffuse, infiltrative , non ulcerative irrgularity of the centre of hard palate

Disease of tongue

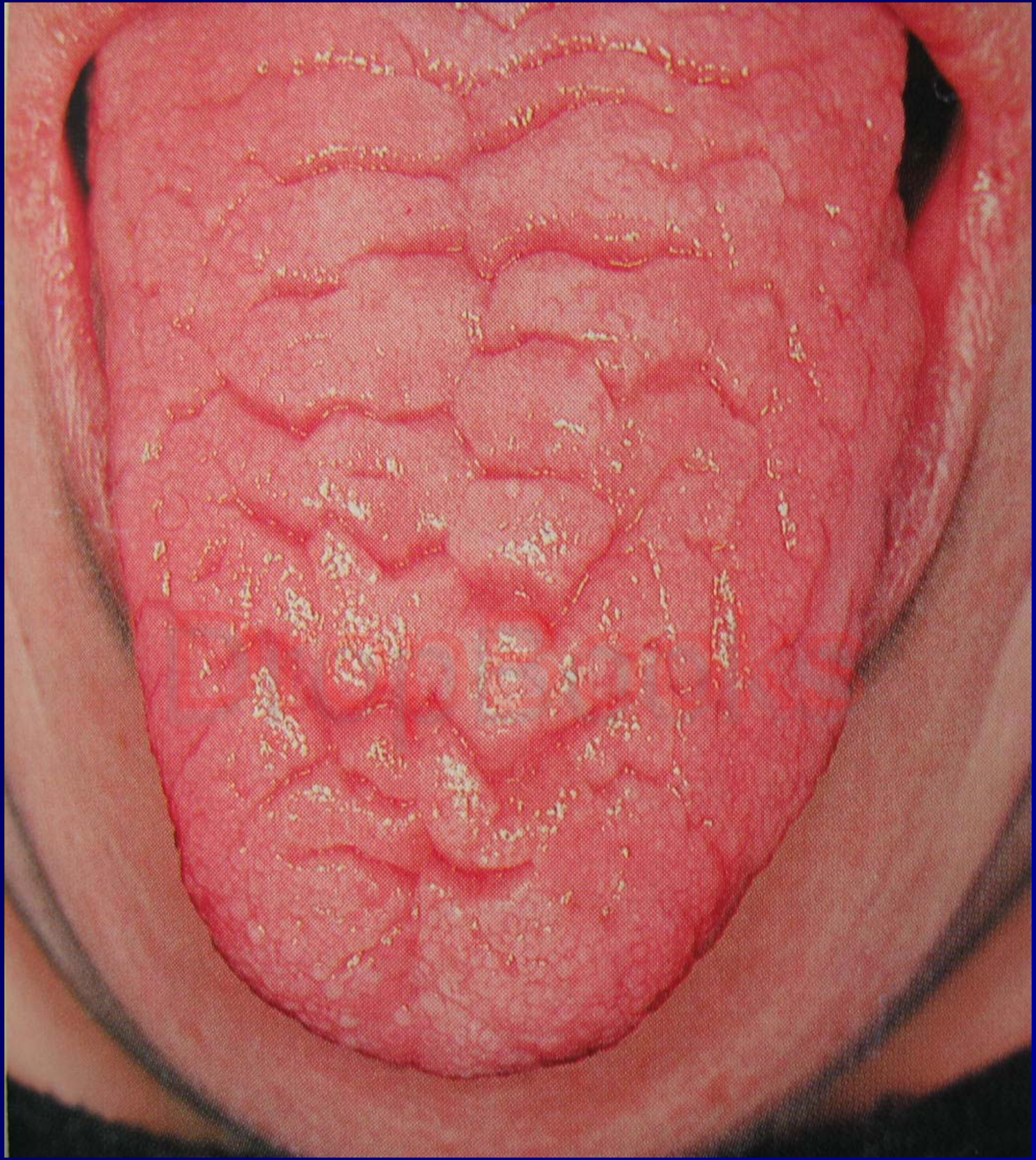
- แบ่งเป็น
- 1. size or morphology changes
- 2. color change

Size or morphology change

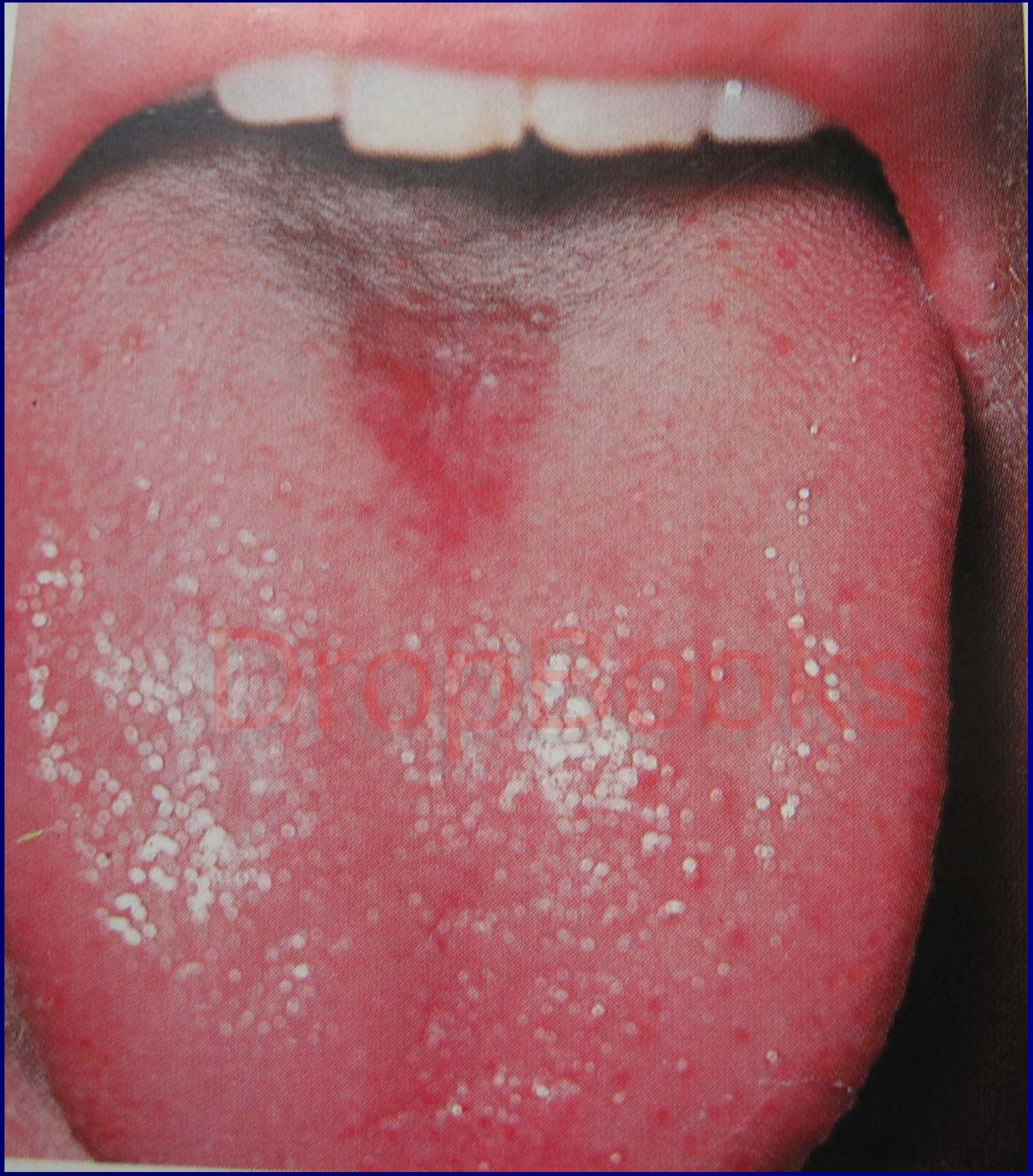
- **1. macroglossia**
    - – Enlarged tongue that may be part of a syndrome found in-- development condition (Down syndrome) , tumor (hemangioma or lymphangioma), metabolic disease (primary amyloidosis) , or endocrine disturbance (acromegaly or critinism)



- **2.fissured (“scrotal”) tongue**
  - Dorsal surface and sides of tongue covered by painless shallow or deep fissures
  - May collect debris and become irritated

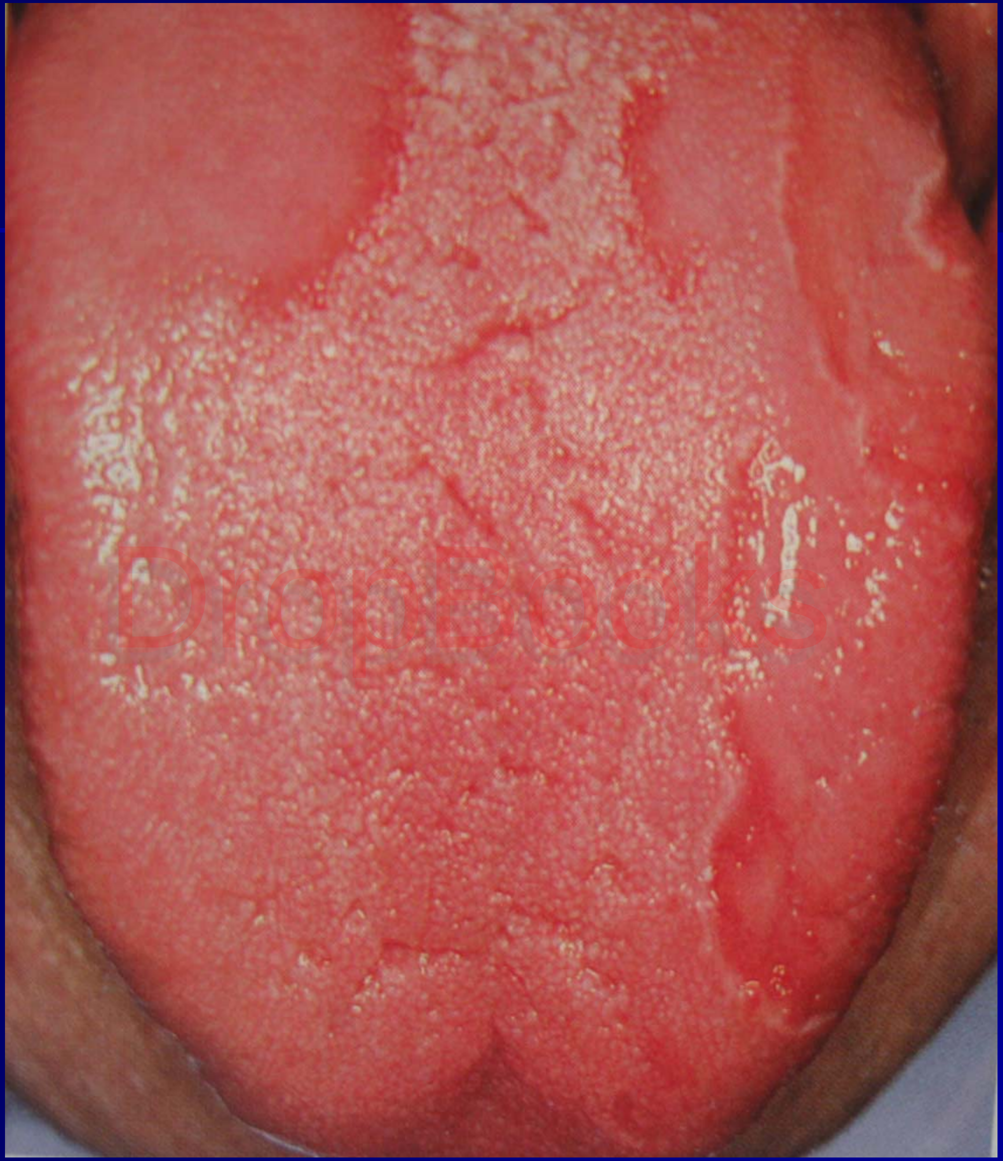


- **3. median rhomboid glossitis**
  - Congenital abnormality of tongue with ovoid, denuded area in median posterior portion of the tongue
  - May be associated with candidiasis and may respond to antifungals

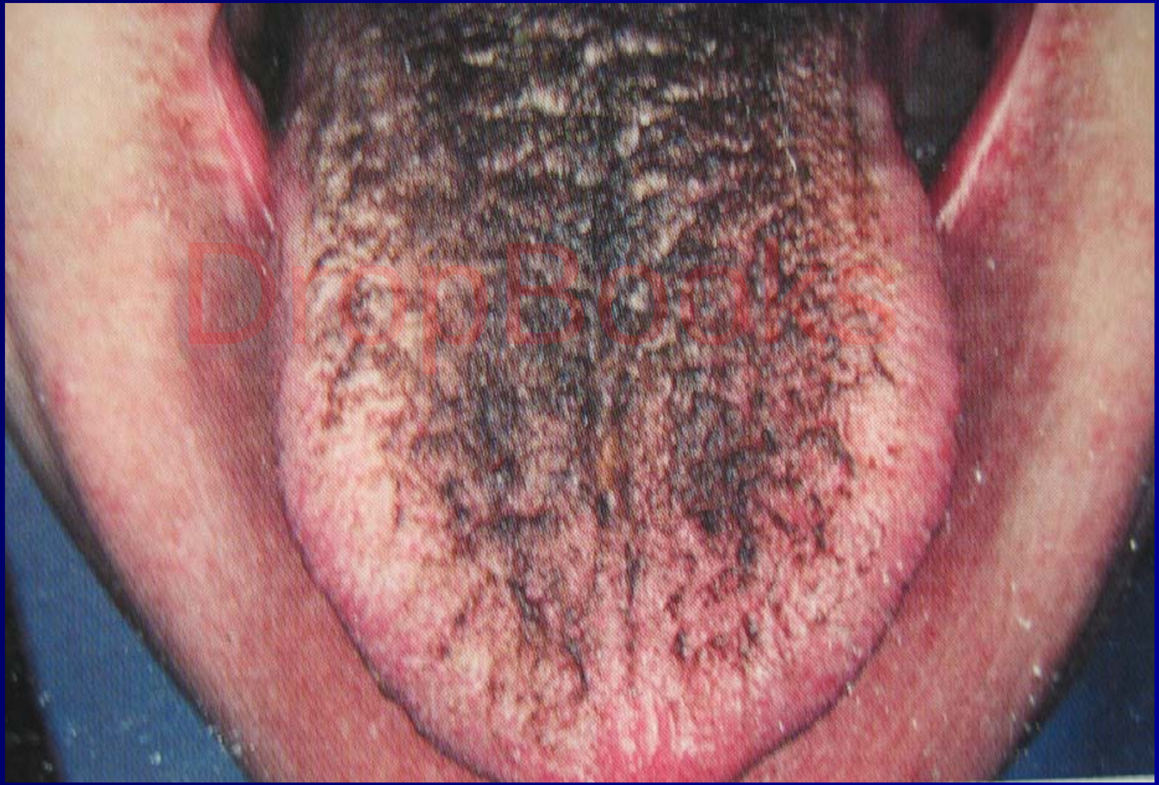


Color changes

- **1.geographic tongue(Benign migratory glossitis)**
  - Asymptomatic inflammatory condition of the tongue, with rapid loss and regrowth of filiform papillae, leading to appearance of denuded red patches “wandering” across the surface of the tongue

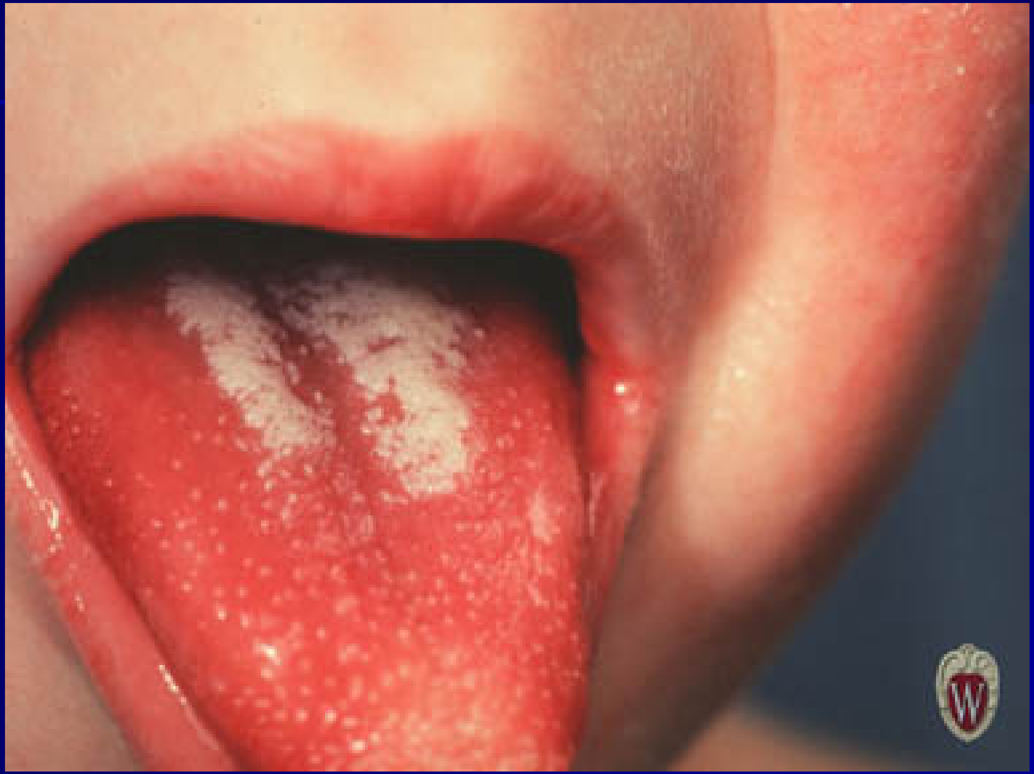


- **2. Black hairy tongue**
  - filiform papillae are so greatly elongated and become colored brown or black due to staining from food , tobacco, chromogenic microorganism (Aspergillus niger)



- Tx.
- Not symptomatic
- Correct etiological factor & remove elongated papillae by brushing tongue (with soft toothbrush and mild toothpaste) may be helpful but not always curative

- **3.strawberry tongue**
  - Papillae of the tongue stand out as bright red dots against the dull white coated surface
  - Typically seen in scalet fever or kawasaki disease



Halitosis

- Cause of halitosis
- 1.upper respiratory infection
  - Bronchiectasis
  - Lung abscess

2.Oral infection

- acute primary herpetic gingivostomatitis
- acute necrotizing ulcerative gingivitis
- periodontal disease
- caries

3.Smoking

4.Herpatic failure (fishy odor)

5.Azothemia (ammoniacal or urinary odor)

6.Diabetic ketoacidosis (sweet, fruity odor)

Oral lesions of HIV disease & AIDS

- **1. fungal**
  - Cryptococosis
  - Histoplasmosis
  - Candidiasis
    - Pseudomembrane
    - Erythematous
    - Candidal leukoplakia
    - Angular cheilitis

2.Bacterial

acute necrotizing ulcerative gingivitis

HIV gingivitis

HIV periodontitis

necrotizing stomatitis

mycobacterium avium intracellular complex and tuberculosis

stomatitis due to enteric organisms

- **3.viral**
  - Herpes simplex
  - Herpes zoster
  - Hairy leukoplakia
  - Warts

- **4.neoplasic**
  - Kaposi's sarcoma
  - Lymphoma

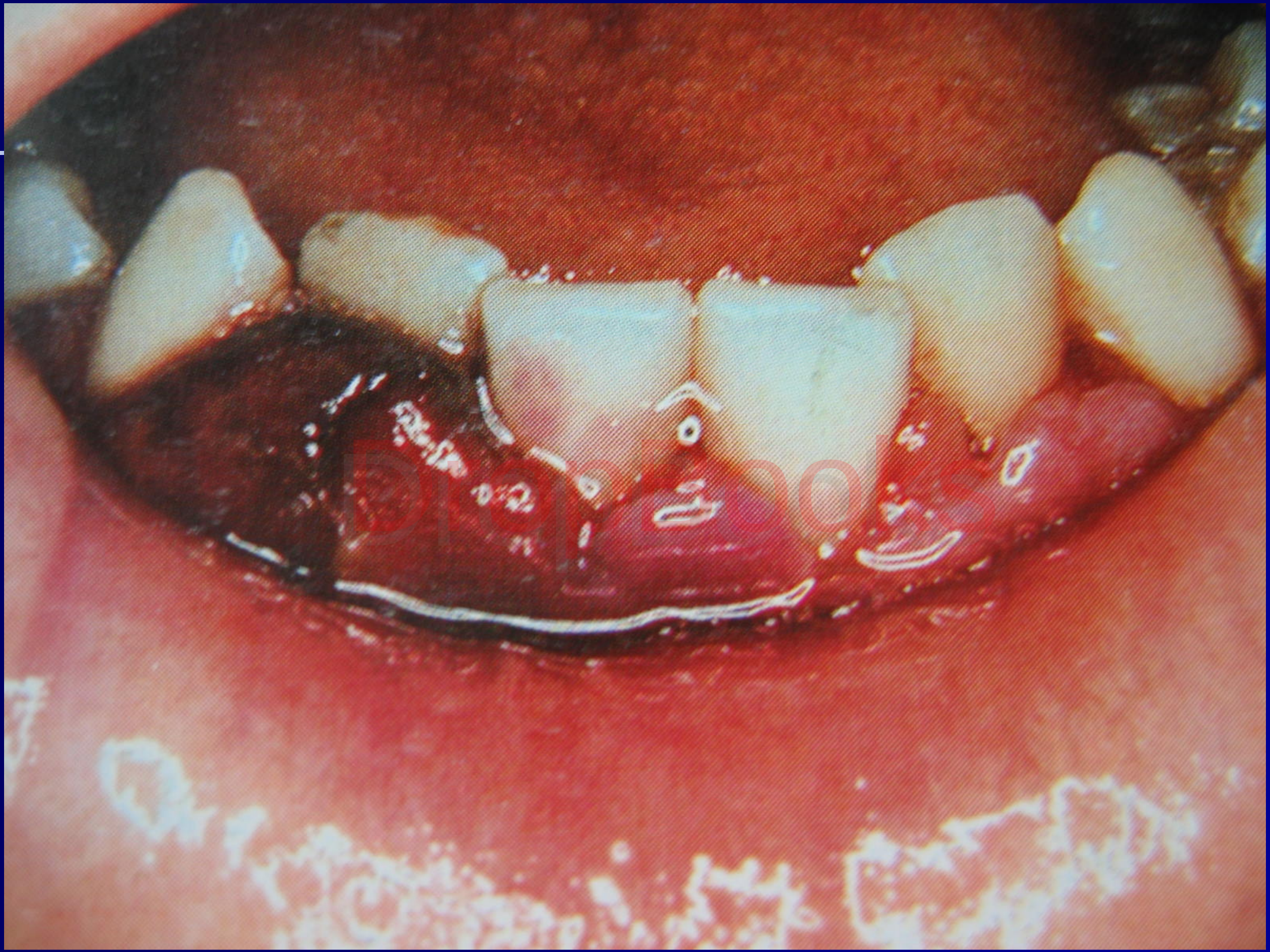
5.Other

- Recurrent aphthous ulcer
- Immune thrombocytopenic purpura
- Xerostomia
- Salivary gland enlargement

Hematologic and nutritional disease

1.Acute leukemia

- Location: gingiva
- clinical feature: gingival bleeding, necrotic ulcers , and enlargement due to malignant infiltrates are seen in forms of leukemia
- If thrombocytopenia– oral petechia, echymosis, and gingival bleeding



2.Bald tongue

-atrophy may be associated with xerostomia, pernicious anemia , iron deficiency anemia ,etc.

-may accompanied by painful, burning sensation

- **3.vit B deficiency**
  - Oral mucositis and ulcer glossitis and burning sensation in tongue

4.Scurvy of Vit C deficiency

- petechiae, gingival swelling, bleeding, and ulceration as well as loosening of teeth

Thank you

For your attention